MISSOURI
BOTANICAL
GARDEN
LIBRARY

Conservation of
this volume completed
through a grant
from the

Camelot Fund
1978-79

See date on fly-leaf

C
Soulsby Add. 760 k

Linneana
QK 91
C Add 760K
1797-1811
v.5

Vol. V.

of the

Botanists Repository

Comprising,

Colour'd Engravings

of

New and Rare Plants

ONLY

With Botanical Descriptions &c.

in

Latin and English,

after the

Linnæan System

by

H. Andrews

Botanical Painter Engraver &c.

Mo. Bot. Garden
1904.

PLATE CCLXXXIX.

PROTEA CORDATA.

Heart-ſhape-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida, ſeu 4-petala. Antheræ lineares, inſertæ petalis infra apicem. Calyx, proprius, nullus. Semina ſolitaria.

BLOSSOM four-cleft or four petals. Tips linear, inſerted into the petals below the ends. Cup, proper, none. Seeds ſolitary.
See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis cordatis. || Protea with heart-ſhaped leaves.

REFERENCE TO THE PLATE.

1. A Floret before the petals have ſeparated, natural ſize.
2. The ſame, magnified, after the burſting of the petals.
2. The Pointal and Seed-bud, natural ſize.

THE Heart-ſhape-leaved Protea was introduced to Britain in the year 1792, from the Cape of Good Hope, by Meſſrs. Lee and Kennedy; at whoſe nurſery it is now, this preſent month of March, 1803, in flower for the firſt time in this country. The plant is only found on the mountains of that part of the Cape called Hottentots Holland; the ſtem, in its native ſtate, laying on the ground, ſeldom more than a foot in length, and the flowers proceeding from it near its baſe. It is rather delicate, ſhould be kept in a very airy part of the green-houſe, and planted in a light loamy ſoil. It is propagated by cuttings, made in the month of April, and kept under a common hand-glaſs, the pot being plunged in a ſhady border.

Of this Protea there is a good figure in Thunberg's *Diſſertatio de Protea,* Upsal, quarto edition, 1781, Plate 5, fig. 1.

MISSOURI BOTANICAL
GARDEN LIBRARY

Protea cordata

PLATE CCXC.

APONOGETON DISTACHYON.

Broad-leaved Aponogeton.

CLASS XI. ORDER IV.

DODECANDRIA TETRAGYNIA. Twelve Chives. Four Pointals.

GENERIC CHARACTER.

CALYX nullus, niſi ſquama ſpathacea externum latus floris cingens, ſimplex, ſeſſilis, ovata, obtuſa, integra, erecta, glabra, colorata.

COROLLA nulla.

STAMINA. Filamenta undecim ad novemdecim, ſuperioribus floribus pauciora, intra ſpatham et capſulas inſerta, ſubulata, glabra, alba, ſpatha multoties breviora. Antheræ erectæ, bifidæ.

PISTILLA. Germina plerumque quatuor, raro tria ſeu quinque. Styli nulli. Stigmata ſubulata, incurvata.

PERICARPIUM. Capſulæ quatuor, rarius tres ſeu quinque, ovatæ, ſubulato-acutæ, exteriore latere gibbæ, interiore planæ, glabræ, unilocularis.

SEMINA, in quacumque capſula tria, baſi capſula affixa, ſeſſilia, obovata, obtuſiſſima, ſub-compreſſa, glabra.

EMPALEMENT none, except a ſheathing ſcale ſurrounding the outer ſide of the flower, ſimple, ſitting cloſe, egg-ſhaped, obtuſe, intire, upright, ſmooth, coloured.

BLOSSOM none.

CHIVES. Threads eleven to nineteen, in the upper flowers fewer, inſerted between the ſpathe and the capſules, awl-ſhaped, ſmooth, white, much ſhorter than the ſpathe. Tips upright, two-cleft.

POINTALS. Seed-buds often four, ſeldom three or five. Shafts none. Summits awl-ſhaped, turned inwards.

SEED-VESSEL. Capſules four, ſeldom three or five, egg-ſhaped, pointed, awl-ſhaped, unequally ſwelled on the outſide, flat on the inner, ſmoothed, one-celled.

SEEDS in each capſule three, fixed to the baſe of it, ſitting cloſe, inverſely egg-ſhaped, very blunt, rather flattiſh, ſmooth.

SPECIFIC CHARACTER.

Aponogeton ſpica bifida; foliis eliptico-lanceolatis, natantibus; bracteis integris; floribus polyandris.

Aponogeton with a two-branched ſpike; leaves eliptically lance-ſhaped, floating; floral leaves entire; flowers with many chives.

REFERENCE TO THE PLATE.

1. A Floret, with its floral leaf, magnified.
2. The Seed-buds and Summits, magnified.

THIS Genus of Plants in the Catalogue of the Kew Garden, is placed to the Class Heptandria, and perhaps, with as much propriety as where it now ſtands in Thunberg, Schreber, &c. for the number of chives in almoſt every floret differs in this, and all the other ſpecies, from ſix to twenty. It is there ſaid to have been introduced to us in 1788 from the Cape of Good Hope by Mr. F. Maſſon. It is found near Cape Town in moſt of the brooks; is very ſweet ſcented, and flowers from April till November. As an aquatic it is very deſirable for thoſe who cultivate thoſe plants, the fragrance of the flowers being nearly equal to our Nymphæa alba, or White Water Lily; and this, added to the contraſted effect of the deep brown antheræ upon the pure white floral leaves, which indeed have the appearance of bloſſoms, give the whole an indeſcribable trait of beauty, peculiar to itſelf. Our figure was taken from a plant in the Hibbertian collection.

Aponogeton distachyon

PLATE CCXCI.

SENECIO PSEUDO-CHINA.

China-root Groundſel.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX. Communis calyculatus, conicus, truncatus; ſquamis ſubulatis, plurimis, in cylindrum ſuperne contractum, parallelis, contiguis, æqualibus, paucioribus baſin imbricatim tegentibus, apicibus emortuis.

COROLLA. Compoſita, calyce altior; Corullulæ hermaphroditæ tubuloſæ, numeroſæ in diſco; Femineæ ligulatæ in radio (ſi quæ adſint).
Propria hermaphroditi infundibuliformis; limbo reflexo, quinquefido.
Femineis (ſi quæ) oblonga, obſolete tridentata.

STAMINA. Hermaphroditis; filamenta quinque, capillaria, minima. Anthera cylindracea, tubuloſa.

PISTILLUM utriſque; germen ovatum. Stylus filiformis, longitudine ſtaminum. Stigmata duo, oblonga, revoluta.

PERICARPIUM nullum. Calyx conico-connivens.

SEMINA hermaphroditis solitaria, ovata. Pappus crinitus, longus. Femineis ſimilima hermaphroditis.

RECEPTACULUM nudum, planum.

EMPALEMENT. Common, double, conical, appearing cut off; ſcales awl-ſhaped, numerous, contracted above into a cylinder, parallel, contiguous, equal, the baſe tiled by a few scales, dead at the ends.

BLOSSOM. Compound, taller than the cup; Hermaphrodite florets tubular, numerous in the diſk; Female florets (if there are any) tongue-ſhaped in the circumference.
Hermaphrodite florets funnel ſhaped, border reflexed, five-cleft.
Female florets (if any) oblong, obſcurely three-toothed.

CHIVES. Of the hermaphrodite florets; five threads, hair-like, very ſmall. Tips forming a tubular cylinder.

POINTAL in either; Seed-bud egg-ſhaped. Shaft thread-ſhaped, the length of the chives. Summits two, oblong, rolled back.

SEED-VESSEL none. Empalement cloſing into a cone.

SEEDS of hermaphrodite florets ſolitary, egg-ſhaped. Feather hairy, long. Females like the hermaphrodites.

RECEPTACLE naked, flat.

SPECIFIC CHARACTER.

Senecio foliis ſinuatis, integris, diſcoloribus; corollis purpureis; radice tuberoſa.

Groundſel with obtuſely indented leaves entire and two-coloured; bloſſoms purple; root tuberous.

REFERENCE TO THE PLATE.

1. The Cup.
2. A Female floret, of the ray or circumference.
3. A Pointal of the female floret magnified.
4. An Hermaphrodite floret of the diſk or centre.
5. The Chives and Pointal of an Hermaphrodite floret, magnified.

THE roots of this plant were received at the ſame time with the double Camellias, China Roſes, &c. from China, by the late J. Slater, Eſq. of Laytonſtone, Eſſex; we have, nevertheleſs, good reaſon to believe it was known formerly in our gardens; but has been certainly loſt, for many years, to us. It is ſaid to have been cultivated by James Sherrard, M. D. in 1732, as copied from Dellinens's Hortus Elthamenſis, into the Kew Catalogue. Miller speaks of it as flowering freely, and perfecting its ſeeds; whereas, in the Hort. Kew. they omit its time of flowering, which, had it ever flowered there, would certainly have been noted. Our drawing was taken in the month of July laſt year, 1802, from a plant in the Hibbertian Collection, the firſt and only time we have ever ſeen it flower in England. It is propagated by the roots, which are large and fleſhy; the plant is herbaceous, and ſhould have but little water during the winter months, as the roots are very ſubject to rot; they are imported from India as a drug, under the name of China-root. Muſt be kept in the hot-houſe, and planted in rich earth.

Senecio Pseudo-China

Pub. as the Act directs 1st Oct. 1803
by H. Woodward Knightsbridge

PLATE CCXCII.

GERANIUM UNDULATUM.

Waved-flowered Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis lanceolatis ciliatis, ſub-integris; petalis ſub-æqualibus, ſub-linearibus, undulatis; floribus umbellatis, pentandris; radice tuberoſa.	Geranium with lance-ſhaped flowers, fringed nearly intire; petals almoſt equal, nearly linear, waved; flowers grow in umbels, five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement cut open, to ſhew its tubular ſtructure.
2. The Chives and Pointal, natural ſize.
3. The Chives, magnified and cut open.
4. The Pointal and Seed-bud, magnified.

THIS tuberous rooted Geranium, from the Cape of Good Hope, has ſome affinity with the G. ſpathulatum, as to the ſhape of the leaves; but the whole habit of the plant is ſo totally different, that we could not, with any degree of propriety, conſider it as a variety of that ſpecies. Our figure was taken from a plant in the Hibbertian collection, to which it was introduced in the year 1800, by Mr. Niven. It flowers in June, and may be propagated by the root. The treatment is the ſame as that required for the reſt, of this diviſion, of the Genus.

Geranium Undulatum

Published as the Act directs 1st April 1825
by J. Andrews & Hampstead Road

PLATE CCXCIII.

LACHNÆA PURPUREA.

Purple-flowered Lachnæa.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx nullus. Corolla quadrifida; limbo inæquali. Semen unum, ſub-baccatum.	Cup none. Bloſſom four-cleft; border unequal. One ſeed, like a berry.

See Lachnæa Eriocephala, Pl. CIV. Vol. II.

SPECIFIC CHARACTER.

Lachnæa capitulis ſolitariis; corollis glabris, purpureis; foliis trigonis, obtuſis, quadrifariam imbricatis.	Lachnæa with ſolitary heads of flowers; bloſſoms ſmooth, purple; leaves three-ſided, obtuſe, tiled in four-rows.

REFERENCE TO THE PLATE.

1. One of the floral Leaves, which ſurround the head of flowers at the baſe.
2. A Flower complete.
3. A Bloſſom cut open, the lower part cut off, to ſhew the inſertion of the Chives at the mouth.
4. The Pointal, natural ſize.
5. The ſame magnified.

This moſt ſingular genus of plants, in external appearance ſo reſembling paſſerina, yet ſo perfectly diſtinct in the parts of fructification, is certainly amongſt the handſomeſt of the natural order in which it ranks. The long ſlender chives which extend nearly to the length of the border of the bloſſom, independent of the ſingular retrofraction of one of its ſegments, give it a character, we think, decidedly ſufficient on which to have formed the Genus. This is the third ſpecies known; it was introduced to the Hibbertian collection, in 1800, by Mr. Niven, from the Cape of Good Hope. It is a very delicate plant, ſubject to be deſtroyed by damps, flowers in July, and may be increaſed by cuttings. It thrives beſt in a mixture of light ſand and loam.

Thunberg, in his Prod. Plant. Cap. has referred the whole genus to Passerina.

Lachnaea purpurea

PLATE CCXCIV.

PROTEA CANDICANS.

Hoary-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 4-fida, ſeu 4-petala. Antheræ lineares, inſertæ petalis infra apicem. Calyx proprius, nullus. Semina ſolitaria.	Blossom 4-cleft, or 4 petals. Tips linear, inſerted into the petals below the point. Cup, proper, none. Seeds solitary. See Protea formosa, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis apicibus tridentatis, eliptico-lanceolatis, obliquis, candidiſſimis; capitulis terminalibus; calyx imbricatus, ſquamis acutis; corollis luteis.	Protea with leaves three-toothed at the ends, eliptically-lance-ſhaped, oblique and very hoary; heads of flowers terminal; cup tiled, ſcales pointed, bloſſoms yellow.

REFERENCE TO THE PLATE.

1. A Floret, the petals ſeparated, natural ſize.
2. One of the Petals magnified.
3. The Pointal, and Seed-bud, natural ſize, the Summit detached, magnified.
4. The Empalement, natural ſize.

Our preſent plant is one of the rareſt Proteas at this time in England; as, we believe, there has never been but one importation of the ſeeds from the Cape, and no one species of this numerous genus is with more difficulty propagated by cuttings. Its lower leaves are apt to ſuffer much from damps in winter; in conſequence, the ſtem becomes bare till near the top; the plant grows about three feet high, and flowers in Auguſt, or September. Our figure was taken from the Hibbertian collection, where it flowered, in 1802, for the firſt time in Britain. We owe its introduction to Meſſrs. Lee and Kennedy, Hammerſmith, about the year 1790. We have our doubts of this plant being the P. tomentoſa of Thunberg; for although he, in his deſcription of that ſpecies, comes nigh many of the characters of P. candicans, yet his determining the leaves to be linear, and downy, and our having drawings, taken from two other ſpecies, approaching this in habit, yet nigher affined to P. tomentoſa, we have retained his ſpecific title for one of them, the other yet unnamed; which will both be given in due courſe.

Protea cordata.

PLATE CCXCV.

PASSIFLORA AURANTIA.

Norfolk Iſland Paſſion-Flower.

CLASS XX. ORDER IV.

GYNANDRIA PENTANDRIA. Chives on the Pointal. Five Chives.

ESSENTIAL GENERIC CHARACTER.

TRIGYNA. Calyx 5-phyllus. Petala 5. Nectarium corona. Bacca pedicellata.	THREE ſtyles. Cup 5-leaved. Petals 5. Honey-cup forming a crown. Berry ſtanding on a foot-ſtalk.

See Pl. CCVII. PASSIFLORA MALIFORMIS. Vol. IV.

SPECIFIC CHARACTER.

Paſſiflora foliis trilobis, lobis oblongis obtuſis, medio longiore; petiolis biglanduloſis; nectario cylindraceo, denticulato; corolla aurantia.	Paſſion-Flower with three-lobed leaves; lobes oblong, obtuſe, the middle one the longeſt; foot-ſtalks with two glands; honey-cup cylindrical and toothletted; bloſſom orange-coloured.

REFERENCE TO THE PLATE.

1. Exhibits the half of a flower as cut perpendicularly through the middle, with the whole of the Pointal and Chives in their place.

THIS ſpecies of Paſſion Flower, from Norfolk Iſland, was introduced to Britain in the year 1792, and was firſt raiſed, from ſeeds, at the Hammerſmith Nurſery. It is a greenhouſe plant, loving heat and drought, thrives in a light ſandy ſoil, and is readily increaſed by cuttings; which ſhould be placed in the heat of the bark-bed in the hothouſe, or cucumber hot-bed, in the month of April.

In the young ſtate of the plant, the leaves are leſs harſh, appear rather ſcolloped than lobed, and much reſemble in ſhape thoſe of the Maiden-hair Fern, or Adiantum Capillus-veneris; whence the trivial name, *adiantifolia,* which it bears in moſt collections. But, as there can be no doubt of our preſent plant being that deſigned by Forſter, in his Prod. flor. inſul. auſtral. No. 326; of Cavanilles in his Diſſertationes claſſis Monadelphiæ, Diſſ. 10. p. 457; and as laſtly quoted by Willdenow, in his new Sp. Plant. Tom. 3, Part 1, p. 620; we have, without heſitation, adopted the ſpecific title it there bears. As an addition to the very few handſome climbing plants fit to decorate the trelliswork of our modern greenhouſes, or conſervatories, this plant muſt be conſidered as a great acquiſition; as the growth is rapid, the foliage of a fine green, and the flowering abundant.

Our figure was taken from a plant in the conſervatory of the Hibbertian collection, Clapham common.

Passiflora aurantia

PLATE CCXCVI.

LACHENALIA ROSEA.

Roſe-coloured Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-partita, infera; petalis tribus interioribus longioribus. Stamina erecta. Capſula ſubovata, trialata. Semina globoſa.	Blossom 6-divided, beneath; the three inner petals the longeſt. Chives erect. Capſule nearly egg-ſhaped, three-winged. Seeds globular.

See Lachenalia pendula, Pl. XLI. Vol. I.

SPECIFIC CHARACTER.

Lachenalia foliis binis, lanceolato-linearibus, obtuſis; petalis interioribus longioribus; ſcapo lævi filiforme; corollis roſeis.	Lachenalia with two leaves between, lance and linear-ſhaped, obtuſe; the inner petals the longeſt; flower-ſtem ſmooth and thread-ſhaped; bloſſoms roſe-coloured.

REFERENCE TO THE PLATE.

1. A Bloſſom cut open, ſhewn from the inſide, the Chives in their place.
2. The ſame, ſhewn from the outſide.
3. The Seed-bud and Pointal, natural ſize.

This plant we believe to be perfectly new to Britain, and in no other collection, at preſent, than that of G. Hibbert, Eſq. Clapham; where the drawing of our figure was taken in May, 1802; and to which it had been added, the preceding year, by Mr. Niven, from the Cape of Good Hope.

It is a tender bulb, and rather impatient of moiſture; increaſes by the bulb; ſhould not be removed from its pot but to give it freſh earth, and is fond of a light, loamy ſoil. It is without ſcent.

Sachenalia rosea

PLATE CCXCVII.

NYMPHÆA ODORATA.

Sweet-ſcented Water-Lily.

CLASS XIII. ORDER I.

POLIANDRIA MONOGYNIA. Many Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX 4, 5, ſeu 6-phyllus. Corolla polypetala. Bacca multi-locularis, truncata.	Cup 4, 5, or 6-leaved. Bloſſom many petals. Berry many-celled, appearing cut off at top. See NYMPHÆA CÆRULEA, Pl. CXCVII. Vol. III.

SPECIFIC CHARACTER.

Nymphæa foliis ſubrotundis, integris emarginatis, lobis divaricatis, obtuſiſſimis, margine parum incurvatis; calyce tetraphyllo; flore albo.	Water Lily with almoſt round leaves, entire, and notched at the end; lobes ſtraddling, very obtuſe, and turned up ſlightly at the edge; cup four-leaved; flower white.

REFERENCE TO THE PLATE.

1. A Chive.
2. The Seed-bud and Summits.
3. The Seed-bud cut tranſverſely.

THIS ſpecies of Water-Lily we ſhould conſider rather as a variety, than as a diſtinct ſpecies; it has every character of our common white Water-Lily, except the ſize and hardineſs; it has the ſame powerful fragrance, but will not ſtand the ſeverity of our winters. It is a native of Carolina and Virginia, North America; was introduced to us in the year 1786, by William Hamilton, Eſq. of Philadelphia, and flowers during the ſummer months, if kept in the hot-houſe. Requires the ſame treatment as the blue ſpecies from the Cape of Good Hope. May be increaſed from the ſeed, or from the root. Our drawing was taken from a plant in the Clapham collection.

Nymphæa odorata

PLATE CCXCVIII.

ANTHERICUM COSTATUM.

Ribbed-leaved Anthericum.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX, nullus.

COROLLA. Petala ſex, oblonga, obtuſa, patentiſſima.

STAMINA. Filamenta ſex, ſubulata, erecta. Antheræ parvæ, incumbentes, quadriſulcæ.

PISTILLUM. Germen obſolete trigonum. Stylus ſimplex, longitudine ſtaminum. Stigma obtuſum, trigonum.

PERICARPIUM. Capſula ovata, glabra, triſulca, trilocularis, trivalvis.

SEMINA numeroſa, angulata.

EMPALEMENT, none.

BLOSSOM. Six petals, oblong, blunt, ſpreading very much.

CHIVES. Six threads, awl-ſhaped, upright. Tips ſmall, laying on the threads, four-furrowed.

POINTAL. Seed-bud bluntly three-ſided. Shaft ſimple, the length of the chives. Summit blunt, and three-cornered.

SEED-VESSEL. Capſule egg-ſhaped, ſmooth, three-furrowed, three-valved.

SEEDS numerous, angulated.

SPECIFIC CHARACTER.

Anthericum foliis hirſutis, planis, coſtatis, lineari-enſiformibus, ſupra medium reflexis; ſcapo ſimplici, glabro; floribus albis; radice bulboſo.

Anthericum with hairy, flat, leaves, ribbed, linearly ſword-ſhaped, turned back from the middle; flower-ſtem ſimple, ſmooth; flowers white, root bulbous.

REFERENCE TO THE PLATE.

1. The Chives and Pointal, magnified.
2. The Seed-bud, Shaft, and Summit, magnified.
3. The half of the Seed-bud cut tranſverſely, magnified.

IT is much to be lamented that we, as yet, have not diſcovered a mode of treatment by which many of the ſpecies of Albuca, Ornithogalum, Anthericum, &c. from the Cape, might be induced to flower with us, after the firſt year from their importation; ſince many of them never produce more than a few leaves afterwards; and this plant, we fear, is amongſt the number. It makes a very handſome and ſweet bunch of flowers, which have conſiderable duration, not leſs than a month from their firſt expanſion. We can ſay little as to the propagation and culture; as it has not as yet increaſed, nor has it produced any flowers ſince our drawing was made, in Auguſt 1801. We think it is only in the Hibbertian Collection, to which it was introduced by Mr. Niven, in 1800, from the Cape of Good Hope.

Anthericum costatum

PLATE CCXCIX.

LACHENALIA REFLEXA.

Reflexed-flowered Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-partita, infera; petalis tribus interioribus longioribus. Stamina erecta. Capſula ſubovata, trialata. Semina globoſa.

BLOSSOM 6-divided, beneath; the three inner petals the longeſt. Chives erect. Capſule nearly egg-ſhaped, three-winged. Seeds globular.

See LACHENALIA PENDULA, Pl. XLI. Vol. I.

SPECIFIC CHARACTER.

Lachenalia foliis ovato-lanceolatis, plurimis; petalis equalibus, acutis, reflexis, rubro punctatis; germine pedicillato, ſubglobоſo.

Lachenalia with leaves between egg and lance-ſhaped, numerous; petals equal, pointed, reflexed, and dotted with red ſpots; ſeed-bud with a foot-ſtalk, and roundiſh.

REFERENCE TO THE PLATE.

1. One of the Petals, which are divided to the baſe, with its chive.
2. The Seed-bud, Shaft, and Summit, natural ſize.
3. The ſame, magnified.

THIS curious Lachenalia, for ſuch it muſt be conſidered, though in many parts widely different from its congeners, is a native of the Cape of Good Hope, and was received from thence in the year 1798, by J. Vere, Eſq. of Kenſington Gore; in whoſe collection, we believe, it is only to be found, and where our drawing was taken in the month of June 1801. It is a tender bulb, and requires a conſiderable degree of heat to make it flower, and does not appear to have any tendency to increaſe, although, Mr. Anderſon informs us, he has tried it in various ſituations and ſoils to that end.

Lachenalia reflexa

PLATE CCC.

GERANIUM OXALIDIFOLIUM.

Wood-Sorrel-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis ternatis, foliolis ovatis, obtuſis, ciliatis; floribus pentandris; radice tuberoſa.	Geranium with leaves compoſed of three leaflets, which are egg-ſhaped, obtuſe, and fringed; flowers with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement of a flower cut open, to ſhew its tubular ſtructure.
2. The Chives and Pointal, natural ſize.
3. The Chives ſpread open, magnified.
4. The Pointal, natural ſize.
5. The ſame, magnified.

THE ſpecies of Geranium here figured, is of the ſame character, in all points of view, as moſt of the tuberous ſpecies lately introduced from the Cape by G. Hibbert, Eſq. in whoſe collection, at Clapham, it is only to be found, at preſent; and where our drawing was taken, in July 1802.

Geranium oxalidifolium

PLATE CCCI.

PROTEA GRANDIFLORA. *Var. foliis undulatis.*

Large-flowered Protea. *Waved-leaved Var.*

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 4-fida, ſeu 4-petala. Antheræ lineares, inſertæ petalis infra apicem. Calyx proprius nullus. Semina ſolitaria.

Blossom 4-cleft, or 4 petals. Tips linear, inſerted into the petals below the end. Cup proper, none. Seeds ſolitary.

See Protea formosa, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis lanceolatis glaberrimis, utrinque acuminatis, marginibus ſubcalloſis, parum undulatis; ſquamæ calycinæ lanceolatæ erectæ, interiores pilis longiſſimis nigris criſtitatæ.

Protea with lance-ſhaped leaves, ſmooth, tapered to both ends, rather thickened at the edges, and a little waved; the ſcales of the empalement are lance-ſhaped and upright, the inner ones creſted, with very long black hairs.

REFERENCE TO THE PLATE.

1. A Flower complete, as it ſtands on the receptacle of the common cup.
2. The ſame, with one of the petals detached, to ſhew the ſituation of the chives near the ends.
3. The Pointal, complete.

The round tufts of long hair which terminate the inner ſcales of the cup, in this Protea, and its varieties, conſtitute its principal, diſtinguiſhing ſpecific character from P. ſpecioſa; whoſe ſcales are fringed at the ſummits, and to which our preſent plant is neareſt allied. It is, without doubt, one of the handſomeſt of this fine tribe of plants; not only in the beauty of the bloſſom, but for its general habit; as it does not grow above three feet high, very buſhy, and producing its flowers at the age of three or four years. It is increaſed by cuttings only, as are moſt of the ſpecies of this extenſive genus, none of them perfecting their ſeeds in this climate, or producing roots by laying the branches. Our drawing was made from a plant in the Hibbertian collection, to which it was introduced in 1800, by Mr. Niven, from the Cape of Good Hope, in the month of May, 1802.

PLATE CCCII.

LACHENALIA FRAGRANS.

Sweet-ſcented Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 6-petala, infera; petalis tribus interioribus longioribus. Stamina erecta. Capſula ſubovata trialata. Semina globoſa.

BLOSSOM ſix petals, beneath; the three inner petals the longeſt. Chives erect. Capſule nearly egg-ſhaped, three-winged. Seeds globular.

SPECIFIC CHARACTER.

Lachenalia foliis geminis, ovato-oblongis, humi adpreſſis; corollis campanulatis pedunculatis horizontalibus; petalis ſub-æqualibus; ſcapo erecto.

Lachenalia with one pair of leaves, oblong-egg-ſhaped, laying on the ground; bloſſoms bell ſhaped with foot-ſtalks, growing horizontally; petals nearly equal; flower-ſtem upright.

REFERENCE TO THE PLATE.

1. A Bloſſom with the Chives in their place, one of the tips detached and magnified.
2. The Seed-bud, Shaft and Summit.
3. The ſame, magnified.
4. The Seed-bud, cut tranſverſely, magnified.

THE extreme fragrance of this plant, amply compenſates for its want of beauty; it retains its ſweetneſs through the whole period of its flowering, which is of near a month's continuance. There is a ſpecies of this genus, much reſembling our plant in flower, but nothing in the leaf; it is known by the name of L. patens, and has been frequently ſold for this, but its ſcent is quite different, and it flowers much earlier; that is to ſay, in the month of March, but the L. fragrans does not produce its bloſſoms till May. It is a very hardy greenhouſe bulb, and requires no particular management to make it flower; this, however, it does not do, but once in two years; not even appearing in foliage, but in the ſecond year from its flowering. Our figure was made at the Hammerſmith Nurſery, to which it was introduced, from the Cape of Good Hope, in the year 1798.

Lachenalia fragrans

PLATE CCCIII.

GERANIUM BARBATUM.

Bearded-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Chives united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.

ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis pinnatis; foliolis inequaliter dentatis barbatis; floribus umbellatis; ſtaminibus quinque fertilibus, binis longioribus reflexis; ſcapo polyſtachio; radice tuberoſa.

Geranium with winged leaves; leaflets unequally toothed and bearded; flowers grow in umbels; five fertile chives, the two longeſt reflexed; flower-ſtem branched; root tuberous.

REFERENCE TO THE PLATE.

1. The cup, natural ſize, cut open.
2. The Chives and Pointal, natural ſize.
3. The Chives cut and ſpread open, magnified.
4. The Pointal and Seed-bud, magnified.

THE ſingular bearded termination, on each tooth, of the leaflets of this ſpecies of Geranium, has induced us to give it a diſtinct ſpecific title; although, in many other reſpects, it approaches very near two or three others, already figured, by us, of this long genus. It is from the ſame country with the other tuberous ſpecies, and introduced to the Hibbertian collection in 1800, where our drawing was made in July 1802.

1

2

3

Geranium barbatum

PLATE CCCIV.

DAVIESIA ULICIFOLIA.

Furze-leaved Daviesia.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, campanulatum quinquedentatum; laciniis equalibus erectis.

COROLLA papillionacea, pentapetala.
Vexillum cordatum erectum.
Alæ oblongæ, vexillo duplo breviores.
Carina dipetala, alis paulo longiora.

STAMINA. Filamenta decem, distincta, assurgentia, longitudine carinæ. Antheræ simplices minimæ.

PISTILLUM. Germen ovato-oblongum. Stylus subulatus, magnitudine et situ staminum. Stigma acutum.

PERICARPIUM. Capsula triangularis, compressa, acuta, unilocularis, bivalvis.

SEMEN unum, reniforme.

EMPALEMENT. Cup one-leaf, bell-shaped, five-toothed; segments equal, upright.

BLOSSOM butterfly-shaped, five-petalled.
Standard heart-shaped, upright.
Wings oblong, half the length of the standard.
Keel two petals, a little shorter than the wings.

CHIVES. Threads ten, distinct, turned upwards, the length of the keel. Tips simple, very small.

POINTAL. Seed-bud oblong egg-shaped. Shaft awl-shaped, of the same size and station as the chives. Summit pointed.

SEED-VESSEL. Capsule triangular, flat, sharp pointed, one cell, two valves.

SEED one, kidney-shape.

SPECIFIC CHARACTER.

Daviesia foliis lanceolatis, rigidis pungentibus; floribus axillaribus spicatis.

Daviesia with lance-shaped leaves, harsh and pricking; flowers grow from the insertion of the leaves in spikes.

REFERENCE TO THE PLATE.

1. The Empalement of the flower, natural size.
2. The Empalement magnified.
3. The Standard, or upper petal of the blossom.
4. One of the Wings of the blossom.
5. The two petals of the Keel.
6. The Chives, magnified.
7. The Pointal.
8. A ripe Seed-vessel.

THIS division of the butterfly flowered plants, from New Holland, was among the first genera which were raised from the seeds of that country, in Britain. And though we have possessed the plants so long, and both species, or rather the two varieties, perfect their seeds with us; yet are the plants very scarce, few of them are to be met with, and seldom more than a plant, or two, is to be found in any collection. The Daviesias grow about a foot and a half high, and when in flower make a very pretty appearance, as nearly the whole bush is covered with blossoms. They are rather tender, and are impatient of wet, which is, perhaps, the greatest enemy many of the plants from that country have to encounter with us. It flowers about April or May; is increased by seeds, or cuttings; should be kept in a small pot, comparatively with what may be used for the same sized plants, and planted in sandy peat. Our drawing was made from the Hibbertian collection, in the month of May 1802.

Pl 504

Daviesia ulicifolia

PLATE CCCV.

GERANIUM CORONILLÆFOLIUM.

Coronilla-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis impari pinnatis, bijugis; foliolis obovatis glabris; floribus umbellatis pentandris; radice tuberoſa.	Geranium with leaves that are winged, with an odd one and two yoked; leaflets inverſely egg-ſhaped, and ſmooth; flowers grow in umbels, with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Cup cut open, to ſhew its tubular ſtructure.
2. The Chives and Pointal, natural ſize.
3. The Chives cut and ſpread open, magnified.
4. The Pointal and Seed-bud, magnified.

THE drawing of this Geranium was taken at Clapham in the month of July, 1802, from a plant in the Hibbertian collection, where, we believe, it is only to be met with, and to which it was introduced, in 1801, from the Cape of Good Hope. It has no particular character, in its appearance, from which we might be led to think any other treatment or mode of culture was neceſſary for this plant, different from the reſt of its congeners.

1

2

3

4

Geranium coronellæfolium

PLATE CCCVI.

ALETRIS FRAGRANS.

Sweet-ſcented Aletris.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA infundibuliformis, rugoſa. Stamina inſerta laciniarum baſi. Capſula trilocularis.	BLOSSOM funnel-ſhaped, wrinkled. Chives inſerted into the baſe of the ſegments. Capſule three-celled.

See ALETRIS SARMENTOSA, Pl. LIV.

SPECIFIC CHARACTER.

Aletris cauleſcens; foliis lanceolatis, laxis; floribus albicantibus, fragrantiſſimis.	Aletris with a woody ſtem; leaves lance-ſhaped, looſe; flowers whitiſh, very ſweet-ſcented.

REFERENCE TO THE PLATE.

1. A miniature repreſentation of the whole plant.
2. A flower complete, natural ſize.
3. The bloſſom cut open, with the Chives in their place.
4. The Seed-bud, Shaft and Pointal; the ſummit detached, magnified.

THE Sweet-ſcented Aletris, from the great height it attains before it flowers, which is, from 9 to 12 feet, and nearly two-thirds of the length of the ſtem, without leaves; takes off much from the merit of this grand plant as cultivated in our colder regions. It is a native of Africa, and muſt be kept in the hot-houſe, in the bark-bed, to have it bloſſom. The flowers are extremely fragrant, open in the evening and cloſe again with the firſt rays of the morning ſun. It is propagated either by ſuckers, which it ſometimes produces, or by cutting off ſmall portions from the roots; which will become plants in about three months, if placed in the heat of a ſtrong hot-bed; theſe are likewiſe very ſweet-ſcented, having the flavour of orris-root, or violets. Our figure was taken from a plant in the collection of J. Vere, Eſq. Kenſington Gore, this preſent month of May, 1803.

A ſchiſm has ariſen on the ſubject of this genus among modern botaniſts; from whom we muſt, however, exclude the celebrated author of Miller's New Gardeners' Dictionary; who, in this inſtance, has preſerved the genus entire. Three genera have, as uſual, been made out of one; the Cape ſpecies are denominated Veltheimias; thoſe known under the names of A. zeylanica and A. guineenſis, are termed Sanſevieras; A. farinoſa and A. fragrans being the only remnants of the original genus. Such are the happy effects, of modern ſcrutiny, upon the works of the antiquated Linnæus! and ſuch might be the anſwer of theſe illuminati, which poor Gradus, in the farce of *Who's the Dupe,* gives to his miſtreſs, when queſtioned upon the utility of his labours; alas, how elſe ſhould *our* merit be diſcovered, but by elancing from the old track of plain ſenſe and nature.

Aletris fragrans

PLATE CCCVII.

PROTEA GLOBOSA.

Globe-flowered Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida, ſeu 4-petala. Antheræ lineares, inſertæ petalis infra apicem. Calyx proprius nullus. Semina ſolitaria.

BLOSSOM 4-cleft, or 4 petals. Tips linear, inſerted into the petals below the end. Cup proper, none. Seeds ſolitary.

See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis eliptico-lanceolatis, apicibus callofis; capitulo globoſo, terminali; foliolis calycinis ovatis, reflexis; floribus luteis.

Protea with eliptically-lance-ſhaped leaves, callous at the ends; head of flowers globular and terminal; leaflets of the cup egg-ſhaped, turned back; flowers yellow.

REFERENCE TO THE PLATE.

1. A Flower complete, natural ſize.
2. One of the Petals of a bloſſom, with its chive, magnified.
3. The Pointal, and Seed-bud, natural ſize.
4. The ſame, magnified.
5. The common Empalement.

THIS ſpecies of Protea, though it does not ſtand among the foremoſt of its congeners in competition for beauty; yet, has its merits, and thoſe of no ſmall moment, as a hardy green-houſe plant; for it rarely miſſes flowering, in the month of May, annually, and its bloſſoms continue in perfection at leaſt two months. It is ſeldom hurt by cold or wet, if not expoſed to either in the extreme. Is eaſily propagated from cuttings, made in the month of May, or June; by the ſame mode as has been deſcribed for the increaſing the preceding ſpecies of the Genus, already figured in this work. We owe the firſt introduction of this plant to Meſſrs. Lee and Kennedy, Hammerſmith, who raiſed it from ſeeds, in the year 1786, received from the Cape of Good Hope. Our figure was made from a plant in the Hibbertian collection.

Protea globosa

PLATE CCCVIII.

CROTOLARIA VERRUCOSA.

Blue-flowered Crotolaria.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Threads in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium tripartitum, magnum, corolla paulo brevius; laciniis duabus ſuperioribus lanceolatis, vexillo incumbentibus; tertia lanceolata, concava, carinam fulciente, trifida.

COROLLA papillionacea.

Vexillum cordatum, acutum, magnum, lateribus depreſſum.

Alæ ovatæ, vexillo dimidio breviores.

Carina acuminata, longitudine alarum.

STAMINA. Filamenta decem, connata, aſſurgentia, linea dorſali fiſſa baſique hiante. Antheræ ſimplices.

PISTILLUM. Germen oblongum, reflexum, hirſutum. Stylus ſimplex, infractus, aſſurgens. Stigma obtuſum.

PERICARPIUM. Legumen breve, turgidum, uniloculare, bivalve, pedicillatum.

SEMEN aliquot, globoſa-reniformia.

EMPALEMENT. Cup three-parted, large, rather ſhorter than the bloſſom; the two ſuperior ſegments lance-ſhaped, laying on the ſtandard; the third lance-ſhaped, concave, ſupporting the keel, three-cleft.

BLOSSOM butterfly-ſhaped.

Standard heart-ſhaped, acute, large, depreſſed on the ſides.

Wings egg-ſhaped, half the length of the ſtandard.

Keel tapered, the length of the wings.

CHIVES. Ten threads, united, turned upwards, with a ſplit line on the back, and gaping at the baſe. Tips ſimple.

POINTAL. Seed-bud oblong, reflexed, hairy. Shaft ſimple, bent inwards at an angle, turned upwards. Summit obtuſe.

SEED-VESSEL. Pod ſhort, turgid, one-celled, two-valved, with a fruit-ſtalk.

SEEDS a few of a rounded kidney-ſhape.

SPECIFIC CHARACTER.

Crotolaria foliis ſimplicibus, ovatis, retuſis; ſtipulis lunatis, declinatis; racemo terminali; ramis tetragonis.

Crotolaria with ſimple leaves, egg-ſhaped, dented at the ends; leaf-props half-moon-ſhaped, turned downwards; bunch of flowers terminal; branches four-ſided.

REFERENCE TO THE PLATE.

1. The Empalement.
2. The Standard.
3. One of the Wings.
4. The two petals of the Keel.
5. The Chives.
6. The Pointal and Seed-bud, the Summit detached, magnified.
7. A half ripe Seed-veſſel.
8. The ſame laid open.

THIS handſome annual is an old inhabitant of our hot-houſes, for it has been cultivated ſo long ago as the year 1731, by Mr. Miller; but from its character as an annual, our ſummers not proving always congenial to the perfecting its ſeeds, it has at intervals been loſt to us. It is a native of the Eaſt Indies, and, in general, good ſeed may be procured by keeping the plants constantly in a hot-bed or hot-houſe; but the beſt method is to raiſe them on a ſtrong hot-bed, keeping them there till in flower, and then transferring them to the hot-houſe or dry-ſtove, to perfect their ſeeds. Our drawing was taken from a fine ſpecimen, communicated by the Hon. W. H. Irby, from his ſelect collection at the Parſonage, Farnham Royal, Bucks. Flowers in May or June, and ripens its ſeeds in Auguſt or September.

Pl. xxx

Cordiana verrucosa

PLATE CCCIX.

PULTENÆA VILLOSA.

Hairy Pultenæa.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX quinquedentatis, utrinque appendiculatus. Corolla papilionacea, alis vexillo brevioribus. Legumen uniloculare, diſpernum.

CUP five-toothed, with a hanging prop on each ſide. Bloſſom butterfly-ſhaped, the wings ſhorter than the ſtandard. A one-celled pod, two seeded.

SPECIFIC CHARACTER.

Pultenæa foliis oblongis, villoſis; floribus axillaribus, ſolitariis, ſpicatis; caule villoſo; calycibus inappendiculatis.

Pultenæa with oblong, hairy leaves; flowers grow from the inſertion of the leaves, ſolitary, and in ſpikes; stem hairy; cup without props.

REFERENCE TO THE PLATE.

1. A Leaf.
2. The Cup, natural ſize.
3. The Standard of the bloſſom.
4. One of the Wings of the bloſſom.
5. The two Leaves of the keel.
6. The Empalement, Chives, and Pointal, magnified.
7. The Seed-bud, Shaft, and Summit, magnified.

WHERE to place the limits to the various new genera of this very extended natural order of plants, with butterfly bloſſoms, from New Holland, appears a taſk of ſome difficulty with our modern botaniſts; for, no ſooner have we formed an eſſential character for a genus, than immediately we are ſtruck with the appearance of new plants, whoſe whole habits aſſimilate with our newly conſtructed family, but in the principal and pointed eſſential character. In ſuch predicament ſtands our preſent ſubject, it wants the appendicula to the cup, yet has it been placed, by Willdenow, &c. to Pultenæa; and with good reaſon, we preſume, for if every difference of this nature was taken up, on which to form new genera, nearly every plant from that country would furniſh grounds for new names; and, to ſay the truth, we think they are, already, ſufficiently extended. The Pultenæas are all rather impatient of wet, and although they are not frequently killed by too much moiſture, yet they become unſightly, by loſing all their lower leaves. This ſpecies grows to the height of about three feet; and, when in flower, makes a very handſome appearance. It perfects its ſeeds, and may be increaſed by cuttings, which ſhould be put in about the beginning of April. A mixture of ſandy peat three parts, and one fourth part of loam, is the beſt ſoil to grow it in. It was amongſt the firſt plants which were raiſed from Botany Bay ſeeds in this country. Our figure was made at the Hammerſmith nurſery, in 1801.

Pultenea villosa

PLATE CCCX.

STACHYS COCCINEA.

Scarlet Clownheal.

CLASS XIV. ORDER I.

DIDYNAMIA GYMNOSPERMIA. Two Chives longer. Seed naked.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tubulatum, angulatum, ſemiquinquefidum, acuminatum, perſiſtens; dentriculis acuminatis, ſubulatis, ſubinæquale.

COROLLA monopetala, ringens; tubus breviſſimus; faux oblonga, ad baſin deorſum gibba; *labium ſuperius* erectum, ſubovatum, fornicatum, ſæpe emarginatum; *labium inferius* majus, trifidum lateribus reflexum; *lacinula intermedia* maxima, emarginata, replicata.

STAMINA. Filamenta quatuor, quorum duo breviora, ſubulata, ad latera faucis recurvata. Antheræ ſimplices.

PISTILLUM. Germen quadripartitum. Stylus filiformis, ſitu et longitudine ſtaminum. Stigma bifidum, acutum.

PERICARPIUM nullum. Calyx vix mutatus.
SEMINA quatuor, ovata, angulata.

EMPALEMENT. Cup one-leaf, tubular, angular, five ſhallow clefts, taper, permanent; toothlets taper, awl-ſhaped, nearly equal.

BLOSSOM one petal, gaping; tube very ſhort; mouth oblong, hunched downwards towards the baſe; *upper lip* upright, rather egg-ſhaped, arched, often notched at the end; *lower lip* large, three-cleft, ſide ones reflexed; the *middle ſegment*, which is the largeſt, notched at the end, and folded back.

CHIVES. Four threads, of which two are ſhorter, awl-ſhaped, bent to the ſides of the mouth. Tips ſimple.

POINTAL. Seed-bud with four diviſions. Shaft thread-ſhaped, of the length and ſituation of the chives. Summit cloven, ſharp-pointed.

SEED-VESSEL none. The cup ſcarce changed.
SEEDS four, egg-ſhaped, angular.

SPECIFIC CHARACTER.

Stachys verticillis ſexfloris; foliis ovato-oblongis, baſi cordatis, crenatis; floribus coccineis.

Clownheal with ſix flowered whorls; leaves oblong-egg-ſhaped, heart-ſhaped at the baſe, ſcolloped; flowers ſcarlet.

REFERENCE TO THE PLATE.

1. The Cup, natural ſize.
2. The Bloſſom cut open, with the chives in their place.
3. The Seed-buds and Pointal, the ſummit detached, magnified.
4. The Seed-buds, magnified.

ALTHOUGH this ſpecies of Stachys muſt be conſidered as an herbaceous plant, yet the ſtem, if kept in the green-houſe, may be preſerved; and therefore, as it is too tender to bear our winters, in the open ground, we muſt conſign it to that ſtation. It is a native of South America; is eaſily propagated by cuttings; flowers in the month of July, or Auguſt, and thrives in rich mould. The figure was taken from a plant in the collection of J. Vere, Eſq. Kenſington Gore, where, we believe, it flowered for the firſt time in Britain.

Stachys cocanea

PLATE CCCXI.

GERANIUM PINNATUM.

Winged-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Monogyna. Stigmata quinque. Fructus roſtratus, penta-coccus.	One Pointal. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis pinnatis; foliolis ſubrotundo-ovatis, hirſutis; floribus flavis, ſtaminibus quinque fertilibus; ſcapo polyſtachio; radice tuberoſa.	Geranium with winged leaves; leaflets rather round-egg-ſhaped, and hairy; flowers yellow; five fertile chives; flower-ſtem branched; root tuberous.

REFERENCE TO THE PLATE.

1. A Flower-cup, natural ſize, cut open.
2. The Chives and Pointal, natural ſize.
3. The Chives cut and ſpread open, magnified.
4. The Pointal and Seed-bud, magnified.

The ſpecific title of this plant, originally, belonged to a ſpecies which is, now, confounded amongſt the numerous varieties of Geranium lacerum. And, indeed, the preſent plant is taken as a ſynonim, by Willdenow, with G. aſtragalifolium, of which we have given a figure in a preceding number. This was among the firſt of the tuberous kind of Geraniums known to our gardens. Mr. F. Maſſon, according to the Kew Catalogue, firſt introduced it to the Kew Gardens in 1788. It has nothing particular in its character to require a different treatment from the reſt of the tuberous ſpecies. Our drawing was made from a plant in the Hammerſmith Collection, in March 1801.

Geranium pennatum

PLATE CCCXII.

STYPHELIA VIRIDIS.

Green-flowered Styphelia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX imbricatus. Corolla tubulosa. Stamina fauci inserta. Drupa quinque-locularis. Semina bina.	CUP tiled. Blossom tubular. Chives inserted into the mouth of the blossom. A pulpy berry with five cells. Seeds by twos. See STYPHELIA TRIFLORA. Pl. LXXII. Vol. I.

SPECIFIC CHARACTER.

Styphelia foliis utrinque acuminatis, obliquis, acutis, glaberrimis; floribus axillaribus, solitariis, viridibus.	Styphelia with leaves tapered to both ends, oblique, pointed, very smooth; flowers grow from the insertion of the leaves, solitary and green.

REFERENCE TO THE PLATE.

1. The Cup of a flower, natural size.
2. A Blossom, with the Chives in their place, cut open.
3. The Seed-bud, Shaft, and Summit, the Summit magnified.

FEW of the plants from New Holland have excited more admiration than the Styphelias; the S. tubiflora figured in the New Holland botany of Dr. Smith, the S. triflora given in the first Vol. of this work, our present plant, together with the numerous other species already known from dried specimens, lead us to conjecture that the genus is as copious as any, Banksia not excepted, from that country. This plant grows to the height of two feet, or more; the flowers nearly covering the branches. It is rather delicate, requiring but little water, in the winter months; as it is certain to perish, if kept wet any considerable time. Is propagated by cuttings, and must be kept in a small pot, proportional to the size of the plant, in very sandy peat earth. Our figure was taken from a plant in the Hibbertian collection, in the month of April, 1803. All the plants, at present in Britain, of this species of Styphelia, are the offspring of one solitary seed, received by Messrs. Lee and Kennedy from New Holland, in the year 1791.

Hyphelia viridis

PLATE CCCXIII.

JUSTICIA LUCIDA.

Shining-leaved Juſticia.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, minimum, quinquepartitum, acutum, erectum, anguſtum.

COROLLA monopetala, ringens; tubus gibbus; limbus bilabiatus, labium ſuperius oblongum, emarginatum, labium inferius ejuſdem longitudinis, reflexum, trifidum.

STAMINA. Filamenta duo, ſubulata, ſub labio ſuperiore recondita. Antheræ erectæ, ad baſin bifidæ.

PISTILLUM. Germen turbinatum. Stylus filiformis, longitudine et ſitu ſtaminum. Stigma ſimplex.

PERICARPIUM. Capſula oblonga, obtuſa, baſi anguſtata, bilocularis, bivalvis; diſſepimento valvulis contrario, ungue elaſtico dehiſcens.

SEMINA ſubrotunda.

EMPALEMENT. Cup one-leaf, very ſmall, five-divided, pointed, erect, narrow.

BLOSSOM one petal, gaping; tube hunched; border two-lipped; the upper lip oblong, notched at the end; the under lip of the ſame length, reflexed, and three-cleft.

CHIVES. Two threads, awl-ſhaped, hid under the upper lip. Tips upright, two-cleft at the baſe.

POINTAL. Seed-bud top-ſhaped. Shaft thread-ſhaped, the length and ſituation of the chives. Summit ſimple.

SEED-VESSEL. Capſule oblong, obtuſe, narrowed at the baſe, two-celled, two valved; the partition oppoſite to the valves ſplitting from an elaſtic claw.

SEEDS roundiſh.

SPECIFIC CHARACTER.

Juſticia ſpicis terminalibus; floribus ſubcapitatis; foliis elipticis, nervoſis, bullatis, lucidis; corollis bilabiatis, labio ſuperiore lanceolato; caule fruticoſo, glabro.

Juſticia with terminal ſpikes; flowers grow nearly in heads; leaves eliptic, nerved, bliſtered, and ſhining; bloſſoms two-lipped, the upper lip lance-ſhaped; ſtem ſhrubby, ſmooth.

REFERENCE TO THE PLATE.

1. A Bloſſom cut open, with the Chives in their place.
2. The Cup and Pointal.
3. An unripe Seed.

MOST of the ſpecies of this genus of plants have hitherto been conſidered of little value in our collections, as few of them have woody ſtems, and from that character have a weedy appearance. This plant however is an exception, and is well worthy a place in collections where ornament only, not variety, is ſtudied. It grows to the height of three feet, flowers in the mouth of Auguſt, is eaſily increaſed from cuttings, and may be kept in the hot-houſe, out of the bark-bed. The Juſticia coccinea and this plant approach in the appearance of their flowers and habit; but the leaves differ much as well as many other minuter parts. It is a native of the Eaſt Indies, and was introduced about the year 1794. Our figure was taken from a plant in the Collection of G. Hibbert, Eſq. Clapham Common.

Justicia Curda

PLATE CCCXIV.

ITEA SPINOSA.

Thorny Itea.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, quinquefidum, erectum, acuminatum, minimum, perſiſtens, laciniis acutis, coloratis.

COROLLA. Petala quinque, lanceolata, longa, calyci inſerta.

STAMINA. Filamenta quinque, ſubulata, erecta, longitudine corollæ, calyci inſerta. Antheræ ſubrotundæ, incumbentes.

PISTILLUM. Germen ovatum. Stylus cylindraceus, perſiſtens, longitudine ſtaminum. Stigma obtuſum.

PERICARPIUM. Capſula ovata calyce multoties longior, ſtylo muconato, unilocularis, bivalvis ex duabus coalita apice dehiſcens.

SEMINA numeroſa, minima, oblonga, nitida.

EMPALEMENT. Cup one-leaf, five-cleft, upright, tapered, very ſmall, remaining, ſegments pointed, coloured.

BLOSSOM. Petals five, lance-ſhaped, long, inſerted into the cup.

CHIVES. Five threads, awl-ſhaped, upright, the length of the bloſſom, inſerted into the cup. Tips roundiſh, laying on the threads.

POINTAL. Seed-bud egg-ſhaped. Shaft cylindrical, permanent, the length of the chives. Summit obtuſe.

SEED-VESSEL. Capſule egg-ſhaped, much longer than the cup, tapering into the ſhaft, one-celled, two-valved of two joined, ſplitting at top.

SEEDS numerous, very ſmall, oblong, ſhining.

SPECIFIC CHARACTER.

Itea foliis cuneiformibus, emarginatis; ſpinis axillaribus.

Itea with wedge-ſhaped leaves, notched at the end; ſpines grow at the inſertion of the leaves.

REFERENCE TO THE PLATE.

1. The Empalement, magnified.
2. A Flower complete, magnified.
3. The Chives and Pointal, magnified; part of the cup and the petals taken away, to ſhew the inſertion of the Chives into the cup.
4. The Pointal, magnified.

THIS plant is a native of New Holland, and was introduced from thence by the Right Honourable the Marchioneſs of Rockingham, at the ſame time with the Bauera rubioides of this work; and from a ſpecimen communicated by her Ladyſhip in September, 1801, our drawing was taken. It is a hardy green-houſe plant, continuing in flower from Auguſt till December; makes a very buſhy handſome ſhrub, eſpecially when planted in a conſervatory. Is eaſily propagated by cuttings, made in the month of April, and kept on a gentle heat until they are rooted. It thrives moſt in ſandy peat, with a ſmall mixture of ſandy loam.

Ilea spinosa.

PLATE CCCXV.

ORCHIS BICORNIS.

Two-horned Orchis.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

ESSENTIAL GENERIC CHARACTER.

NECTARIUM corniforme pone florem.	HONEY-CUP like a horn behind the flower. See ORCHIS CILIARIS, Pl. XLII. Vol. I.

SPECIFIC CHARACTER.

Orchis bulbis indivisis; corollis galea bicalcarata; labio quinque-partito.	Orchis with undivided bulbs; helmet of the blossom two spurred, lip five-parted.

REFERENCE TO THE PLATE.

1. A Flower, natural size.
2. The same, magnified, with the front petals cut away to expose the parts of fructification, one of the chives being liberated from its cell.

THIS singular little Orchis was first introduced to us, from the Cape of Good Hope, by Mr. F. Masson, in 1787, but has been lost to our gardens since near that time till last year, when we had the pleasure of seeing it again in the collection of T. Evans, Esq. Stepney; but we much fear, without a fresh supply of roots, it will again soon stand but as a name in our catalogues. It is a very tender and delicate plant; and, like nearly the whole of this natural order, difficult to propagate or preserve in a cultivated state; wherefore we cannot pretend to recommend any particular method. The bulb which flowered at Stepney was planted in sandy peat, and appeared in good health. It flowers in September, loses its leaves soon after flowering, and is extremely fragrant.

Orchis bicornis

PLATE CCCXVI.

OLEA APETALA.

Petal-leſs Olive.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tubulatum, parvum; ore quadridentato, erecto, deciduum.

COROLLA monopetala, infundibuliformis; tubus cylindraceus, longitudine calycis; limbus quadripartitus, planus; laciniis ſubovatis.

STAMINA. Filamenta duo, oppoſita, ſubulata, brevia. Antheræ erectæ.

PISTILLUM. Germen ſubrotundum. Stylus ſimplex, breviſſimus. Stigma bifidum, craſſiuſculum; laciniis emarginatis.

PERICARPIUM. Drupa ſubovata, glabra, unilocularis.

SEMEN. Nux ovato-oblonga, rugoſa.

EMPALEMENT. Cup one-leafed, tubular, ſmall; mouth four-toothed, erect, deciduous.

BLOSSOM one petal, funnel-ſhaped; tube cylindrical, the length of the cup; border four-divided, flat; ſegments nearly egg-ſhaped.

CHIVES. Two threads, oppoſite, awl ſhaped, ſhort. Tips upright.

POINTAL. Seed-bud roundiſh. Shaft ſimple, very ſhort. Summit two-cleft, thickiſh; clefts notched at the ends.

SEED-VESSEL. A pulpy berry, rather egg-ſhaped, ſmooth, one-celled.

SEED. A nut oblong-egg-ſhaped, rough.

SPECIFIC CHARACTER.

Olea foliis elipticis, floribus racemoſis, apetalis.

Olive, with eliptically-ſhaped leaves, flowers in long bunches without petals.

REFERENCE TO THE PLATE.

1. A Flower expanded, magnified.
2. The ſame with the Chives expoſed, magnified.
3. The Seed-bud, Shaft, and Summit, magnified.
4. A half ripe Berry.
5. The ſame cut tranſverſely.

Our preſent figure repreſents a plant a native of New Holland and New Zealand, in the Pacific Ocean; but, we have great reaſon to think, it has been referred, rather raſhly, to the genus under which it is here named; and that it poſſeſſes a diſtinctive character ſufficient on which to have formed a new one. We have, nevertheleſs, as uſual, taken it up under the title it is in general known by, as publiſhed by Vahl, in his Symbolæ Botanicæ, Part III. p. 3, and quoted from him into Willdenow's Sp. Plant. p. 46, and thence into Profeſſor Martyn's ed. of Miller's Dict. article Olea, 5. Whether the fruit of this plant will ever turn to account, when cultivated, as an article of food, time muſt evince; bnt, certainly, it bears an appearance of much hope. It is a ſtrong woody growing ſhrub, forming itſelf into a handſome round-headed plant; and, when in full flower, has a very pretty appearance, having all the neceſſary qualities of ſuch plants as are fit for planting out in a conſervatory. It is propagated by cuttings; ſhould be planted in ſandy peat earth, mixed with a ſmall portion of loam; producing its flowers about February or March. Our drawing was made from a plant in the Hammerſmith Collection, to which it was firſt added in the year 1791; having been raiſed from ſeeds communicated to Meſſrs. Lee and Kennedy by Colonel Paterſon.

Pl. 10

2

3

4

5

Ilex apetala

PLATE CCCXVII.

GERANIUM UNDULATUM. *Var. Minor.*

Waved-flowered Geranium. *Leſſer Var.*

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries. See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis radicalibus lanceolatis, integerrimis, petiolis longitudine foliorum; petalis cuneiformibus, equalibus, undulatis; floribus pentandris; radice tuberoſa.	Geranium with the root leaves lance-ſhaped, quite entire; foot-ſtalks the length of the leaves; petals wedge-ſhaped, equal, waved; flowers with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement cut open, natural ſize.
2. The Chives cut and ſpread open, magnified.
3. The Seed-bud, Shaft, and Summits.

THIS very handſome tuberous Geranium, and which we have rather placed as a variety than a ſpecies, might perhaps by ſome have been conſidered as ſufficiently diſtinct to have formed a ſpecies; but, indeed, much difficulty ariſes in the determining, amongſt this variable tribe, where to fix determinate ſpecific character. Our preſent figure was taken from the Hibbertian Collection, where as yet the plant is only to be ſeen in Britain. It flowers in June or July; does not perfect its ſeeds, nor has the appearance of eaſily propagating from the root; the uſual method with this link of the Geranium family. It thrives in ſandy peat and leaf mould.

Geranium undulatum. Var minor

PLATE CCCXVIII.

HÆMANTHUS MULTIFLORUS.

Many-flowered Blood-Flower.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Involucrum hexaphyllum, maximum, umbelluliferum; foliolis erectis, oblongis, perſiſtentibus.

COROLLA monopetala, erecta, ſexpartita; laciniis erectis, linearibus; tubo breviſſimo, angulato.

STAMINA. Filamenta ſex, ſubulata, tubo corollæ inſerta, corolla longiora. Antheræ incumbentes, oblongæ.

PISTILLUM. Germen inferum. Stylus ſimplex, longitudine ſtaminum. Stigma ſimplex.

PERICARPIUM. Bacca ſubrotunda, trilocularis.

SEMINA ſolitaria, triquetra.

EMPALEMENT. Fence ſix-leaved, large, bearing a ſmall umbel; leaflets upright, oblong, permanent.

BLOSSOM one petal, upright, ſix-parted; ſegments upright, linear; tube very ſhort, angular.

CHIVES. Threads ſix, awl-ſhaped, inſerted into the tube of the bloſſom, longer than the bloſſom. Tips laying on the threads, oblong.

POINTAL. Seed-bud beneath. Shaft ſimple, the length of the chives. Summit ſimple.

SEED-VESSEL. Berry roundiſh, three-celled.

SEEDS ſolitary, three-ſided.

SPECIFIC CHARACTER.

Hæmanthus foliis plicatis, undulatis, erectis, lato-lanceolatis; umbella globoſa; floribus confertis; petalis patentibus; ſcapo ad baſin maculato.

Blood flower with plaited leaves, waved, upright and broad-lance ſhaped; umbel globular; flowers crowded; petals ſpreading; flower-ſtem ſpotted at the baſe.

REFERENCE TO THE PLATE.

1. The Leaves and part of the Flower-Stem, in miniature.
2. A Flower, complete, natural ſize.
3. The Seed-bud, Shaft, and Summit.
4. A Seed-bud, cut tranſverſely.
5. The embryo of a Seed.

THIS plant is ſaid to have been in our European gardens ſo long ago as the year 1603: having, at that time, been ſent to Paris by the younger Robin from Guinea. But however this may be, as yet there is no figure of the plant by which it may be known from many of this beautiful tribe, except the one by the late Mr. Nodder. We are indebted for its laſt introduction to the honourable the Sierra Leone Company, who received, in 1792, the roots of this plant, amongſt many others, from that ſettlement; which were by them preſented to Meſſrs. Lee and Kennedy, at Hammerſmith. Our figure was taken in June from a plant in flower this preſent year, 1803, in the collection of J. Vere, Esq. Kenſington Gore, where, from the particular management of Mr. Anderſon, the ſame root has flowered ſeveral times; a circumſtance that but rarely happens with theſe bulbs after the firſt year from importation. As a native of ſo hot a clime it muſt be kept in the bark bed of the hot-houſe; and, when the plant is not in flower, ſhould be watered but ſparingly. We as yet are unacquainted with any mode by which it may be propagated. It flouriſhes moſt in rich mould. Our figure repreſents the plant in a ſmall ſpecimen, as the head of flowers is frequently, in this country, of three times the ſize.

Haemanthus multiflorus

PLATE CCCXIX.

VICIA GALEGIFOLIA.

Goat's-Rue-leaved Vetch.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Chives in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, tubulatum, erectum, ſemi-quinquefidum, acutum; dentibus ſuperioribus brevioribus, conniventibus; omnibus æqualis latitudinis.

COROLLA papillionacea.

Vexillum ovale, ungue lato oblongo, apice emarginatum cum acumine, lateribus reflexum, linea longitudinali compreſſa elevata.

Alæ duæ, oblongæ, erectæ, ſemicordatæ, ungue oblongo, vexillo breviores.

Carina ungue oblongo bipartito, ventriculo compreſſo, ſemiorbiculato, alis breviore.

STAMINA. Filamenta diadelphia (ſimplex et novemfidum). Antheræ erectæ, ſubrotundæ, quadriſulcæ.

Nectarii glandulæ intra ſtamen compoſitum et germen e receptaculo oritur, brevis, acuminata.

PISTILLUM. Germen lineare, compreſſum, longum. Stylus filiformis, brevior, ad angulum erectum adſcendens. Stigma obtuſum, ſub apice tranſverſe barbatum.

PERICARPIUM. Legumen longum, coriaceum, uniloculare, bivalve, acumine terminatum.

SEMINA plura, ſubrotunda.

EMPALEMENT. Cup one-leaf, tubular, upright, half five-cleft ſharp; the upper teeth the ſhorteſt, approaching; all the teeth of equal breadth.

BLOSSOM butterfly-ſhaped.

Standard oval, with a broad oblong claw, notched at the top, with a point in the middle, ſides reflexed, compreſſed and raiſed in a line running lengthways.

Wings two, oblong, erect, half-heart ſhaped, with an oblong claw, ſhorter than the ſtandard.

Keel, with an oblong two-parted claw, the hollow part compreſſed like a half circle ſhorter than the wings.

CHIVES. Threads in two ſets, (one alone, the other nine-cleft.) Tips upright, roundiſh four-furrowed.

Honey-cup, gland ariſing from the receptacle between the united threads and the ſeed-bud; ſhort and tapered.

POINTAL. Seed-bud linear, compreſſed and long. Shaft thread-ſhaped, ſhorter, turned upwards from an angle. Summit blunt, bearded tranſverſely on the upper part at the end.

SEED-VESSEL. Pod long, tough, one-celled, two-valved terminated by a point.

SEEDS many, rather round.

SPECIFIC CHARACTER.

Vicia pedunculis multifloris erectis; floribus ſtriatis; foliolis ovalibus, ſubtruncatis, reflexis.

Vetch with many-flowered, upright fruit-ſtalks; flowers ſtreaked; leaflets oval, rather appearing cut off at the points, reflexed.

REFERENCE TO THE PLATE.

1. The Cup.
2. The Standard, or upper Petal of the Flower, ſhewn in front.
3. The ſame, ſhewn from the back-ſide.
4. One of the Wings of the Bloſſom.
5. The Keel of the ſame.
6. The Chives, natural ſize.
7. The Pointal, natural ſize.
8. The Chives, magnified, ſhewn from the front ſide.
9. A half-ripe Pod.

THIS pretty plant is a native of New Holland, and was firſt received in ſeeds from thence under the name of Indigofera coccinea, in the year 1800, by Meſſrs. Lee and Kennedy, Hammerſmith. It grows into a buſhy plant, making a number of branches from the root, but is rather a woody than herbaceous plant; yet the branches have all the character of moſt of the ſpecies of this genus. It has not as yet been increaſed by cuttings, but from every appearance the ſeeds will ripen in this country; and there is little doubt but the roots may be divided with ſafety. It flouriſhes in a mixture of ſandy peat and loam. Our figure was taken from a plant in the Collection of Meſſrs. Colvilles, King's Road, Chelſea; where it has likewiſe flowered this preſent Auguſt, 1803.

Vicia galegofolia

PLATE CCCXX.

PULTENÆA ILICIFOLIA.

Holly-leaved Pultenæa.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX quinque-dentatus, utrinque appendiculatus. Corolla papillionacea, alis vexillo brevioribus. Legumen uniloculare, disperмum.

CUP five-toothed, with an appendage on each side. Bloſſom butterfly-ſhaped, wings ſhorter than the ſtandard. Pod one-celled, two ſeeded.

See PULTENÆA DAPHNOIDES, Pl. XCVIII. Vol. II.

SPECIFIC CHARACTER.

Pultenæa foliis haſtatis, ſerratis, rigidis; floribus axillaribus, racemoſis.

Pultenæa with halbert-ſhaped leaves, ſwawed and harſh; flowers grow from the inſertion of the leaves in long bunches.

REFERENCE TO THE PLATE.

1. The Cup, natural ſize.
2. The same, magnified.
3. The Standard, or upper petal of the bloſſom.
4. One of the Wings of the same.
5. The two petals of the keel of the ſame.
6. The Chives and Pointal.
7. The Chives, magnified.
8. The Seed-bud, Shaft and Summit, magnified.

THIS ſpecies of Pultenæa was introduced, from New Holland, about the year 1792, by Meſſrs. Lee and Kennedy, Hammerſmith, and is undoubtedly one of the handſomeſt of the genus. It is difficult to increaſe as the ſeeds do not mature, and it is very rarely propagated by cuttings. It grows to the height of three or four feet; and, when in flower, makes a very brilliant appearance. It is not a long-liv'd plant; is very impatient of wet, and is easily hurt by the cold, ſo ſhould be kept in a dry and warm part of the green-house, or even on a ſhelf in the hot-houſe, during the winter months. It thrives in very ſandy peat earth without any mixture. Our drawing was made from a plant in the Hibbertian Collection, in the month of June, 1801.

Ilex diuaricata

PLATE CCCXXI.

ARETHUSA PLICATA.

Plaited-leaved Arethuſa.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

GENERIC CHARACTER.

CALYX. Spatha foliacea. Perianthium nullum.

COROLLA ringens; petala quinque, oblonga, ſubæqualia, duo exteriora, omnia conniventia in galeam.

Nectarium monophyllum, baſi tubuloſum, intra corollæ fundum, bipartitum; labio inferiore reflexo, lato, rugoſo, longitudine petalorum, propendente; labio ſuperiore lineari, tenerrimo, ſtylo adnato, apice lobato.

STAMINA. Filamenta duo, breviſſima, piſtilli apici inſidentia. Antheræ ovatæ, compreſſæ, tectæ duplicatura labii interioris nectarii.

PISTILLUM. Germen oblongum, inferum. Stylus oblongus, incurvus, labio interiore nectarii veſtitus. Stigma infundibuliforme.

PERICARPIUM. Capſula oblongo-ovata, unilocularis, tri-valvis, angulis dehiscens.

SEMINA numeroſa, aceroſa.

EMPALEMENT. Sheath leafy. Cup none.

BLOSSOM gaping. Five petals, oblong, nearly equal, two outer, all converging into a helmet.

Honey-cup one-leafed, tubular at the baſe, within the bottom of the bloſſom, two-parted; lower lip reflexed, broad, wrinkled, the length of the petals, hanging down forwards; upper lip linear, very delicate, fixed to the ſhaft, lobed at top.

CHIVES. Two threads, very ſhort, ſitting on the top of the pointal. Tips egg-ſhaped, flattened, covered by the folding of the inner lip of the honey-cup.

POINTAL. Seed-bud oblong, beneath. Shaft oblong, incurved, cloathed by the inner lip of the honey-cup. Summit funnel-ſhaped.

SEED-VESSEL. Capſule oblong egg-ſhaped, one-celled, three-valved, ſplitting at the angles.

SEEDS numerous, chaffy.

SPECIFIC CHARACTER.

Arethuſa radice globoſa; folio cordato, plicato, hirſuto.

Arethuſa with a globular root; leaf heart-ſhaped, plaited and hairy.

REFERENCE TO THE PLATE.

1. The Plant, after the Flower has diſappeared.
2. The Petals of the Flower, ſpread open.
3. The Honey-cup, ſpread open.
4. The Chives and Pointal.
5. The ſame, magnified; the hood, to which the chives are attached, lifted up.

THIS ſingular little bulbous rooted plant was received this year, 1803, in the month of April, amongſt a number of other curious new ſeeds and bulbs, from the Eaſt-Indies, by Aylmer Bourke Lambert, Esq. by whom they have been communicated to different collections. Although the plant has conſiderable affinity with Arethuſa, yet we entertain doubts whether it ſhould not be placed to Limodorum, as it wants many of the generic characters of the former genus, and but few, and thoſe but trivial in its correſpondence, to the latter. We have, notwithſtanding, given it the title under which it was ſent, ſubmitting our judgment to what we conceive better authority. There is little doubt but the plant will ſoon be loſt in our collections, as but few of this natural order are either to be propagated or kept by any cultivation we are at preſent acquainted with. Our figure was taken from a plant which flowered in the hot-houſe of J. Vere, Eſquire, Kenſington Gore, in the month of July, before there was any appearance of either root or leaf from the bulb. It was in flower at the ſame time in the Collection of Sir Abraham Hume, Bart. Wormley-Bury, Herts.

1
2
3
4
5

PLATE CCCXXII.

PITCAIRNIA LATIFOLIA.

Broad-leaved Pitcairnia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX triphyllus, ſemiſuperus. Petala 3. Squama nectarifera ad baſin petalorum. Stigmata tria contorta. Capſula tria, introrſum dehiſcentes. Semina alata.

EMPALEMENT three-leaved, half ſuperior. Petals three; with a ſcaly honey-cup at the baſe of the petals. Three ſummits twiſted. Three capſules, ſplitting from the inſide. Seeds winged.

SPECIFIC CHARACTER.

Pitcairnia foliis integerrimis, baſi ſubſpinoſis.

Pitcairnia with leaves quite entire, rather ſpiney at the baſe.

REFERENCE TO THE PLATE.

1. The Empalement.
2. One of the Petals, with its ſcale at the baſe.
3. The Chives and Pointal, cleared from the Petals.
4. The Pointal, the Summits detached, magnified.
5. The Seed-bud, cut tranſverſely.

THE ſpecies of Pitcairnia here figured is a native of Jamaica, and was firſt introduced to Britain by Mr. A. Anderſon, in the year 1785. It does not flower ſo readily as ſome of the other ſpecies, but is equally eaſy to increaſe; flouriſhes in rich earth, and may be kept on a ſhelf of the hot-houſe until its flower-ſtem appears; when, to encourage its flowering, it ſhould be plunged in the bark-bed.—Our drawing was made, in the month of July, from a plant in the Collection of J. Vere, Eſquire, Kenſington Gore.

1

2

3

4

5

Cyrtanthera latifolia

PLATE CCCXXIII.

GERANIUM BARBATUM. *Var. Minor.*

Bearded-leaved Geranium. *Leſſer Var.*

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNIA. Stigmata quinque. Fructus roſtratus, penta-coccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis pinnatis; foliolis inequaliter, dentatis, apice barbatis; floribus umbellatis; petalis linearibus, recurvatis; ſtaminibus quinque fertilibus, binis longioribus; ſcapo polyſtachio; radice tuberoſa.	Geranium with winged leaves, leaflets unequally toothed, and bearded at the point; flowers grow in umbels, petals linear, recurved; five fertile chives, two longer; flower-ſtem branched; root tuberous.

REFERENCE TO THE PLATE.

1. The Cup cut open, to ſhew its tubular ſtructure.
2. The Chives and Pointal, natural ſize.
3. The Chives cut open, magnified.
4. The Pointal, natural ſize.
5. The ſame, magnified.

OUR preſent figure is taken from a plant in the Hibbertian Collection, Clapham; and is a very ſtrong variety of the Bearded-leaved Geranium of a former number, taken from the ſame ſource. It is, as far as appearances lead, no way differing in character from the reſt of the tuberous ſpecies of this genus, to require any other treatment. Flowers in June or July.

Geranium barbatum Var minor

PLATE CCCXXIV.

MAGNOLIA PURPUREA.

Purple-flowered Magnolia.

CLASS XIII. ORDER VII. *of Schreb. Gen. Plants.*

POLYANDRIA POLYGYNIA. Many Chives. Many Pointals.

ESSENTIAL GENERIC CHARACTER.

Calyx 3-phyllus. Petala 6-12. Capſulæ 2-valves, imbricatæ. Semina baccata, pendula.	Cup 3-leaved. Petals 6-12. Capſules 2-valved, tiled. Seeds, berries, pendulous. See Magnolia pumila, Pl. CCXXVI. Vol. IV.

SPECIFIC CHARACTER.

Magnolia foliis obovatis, flaccidis; floribus purpureis; petalis obovatis, divaricatis.	Magnolia with inverſely egg-ſhaped, flaccid leaves; flowers purple; petals inverſely egg-ſhaped and ſtraddling.

REFERENCE TO THE PLATE.

1. The Chives and Pointals.
2. A Chive, magnified.
3. The Pointals.

This fine ſpecies of Magnolia is a native of China and Japan, was introduced to us by the late Mr. Slater of Laytonſtone, to whom we are ſo much indebted for the greateſt number of beautiful plants which have been imported from thence by any individual. It is a very free growing plant; will reſiſt the ſeverity of our winters, if planted in a warm ſituation, and is deciduous; but if kept in the conſervatory, it retains its leaves the whole year, and flowers about June. It is propagated with eaſe by laying, or by cuttings, and thrives in peat earth, with a ſmall mixture of loam. The plant from which our figure was taken is in the magnificent Conſervatory of the Right Honourable the Marquis of Blandford, White Knights, near Reading, Berks; and, we believe, the fineſt ſpecimen of this ſpecies of Magnolia in Britain.

2

3

purpurea

PLATE CCCXXV.

CODON ROYENI.

Prickly Codon.

CLASS XI. ORDER I.

DODECANDRIA MONOGYNIA. Twelve Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, duodecempartitum; foliolis ſubulatis, perſiſtentibus, erectis, alternis brevioribus.

COROLLA monopetala, campanulata, baſi toruloſa; limbo duodecimpartito, aquali.
Nectarium duodecim loculare ex ſquamis 12, unguibus ſtaminum inſertis, conniventibus, receptaculum tegentibus.

STAMINA. Filamenta duodecim, longitudine corollæ. Antheræ craſſæ.

PISTILLUM. Germen ſuperum, conicum. Stylus ſimplex, longitudine ſtaminum. Stigmata duo, longa, ſetacea, divergentia.

PERICARPIUM. Capſula bilocularis.

SEMINA plurima, ſubrotunda, nigra.

EMPALEMENT. Cup one-leaf, twelve-divided; leaflets awl-ſhaped, remaining, upright, the alternate ones ſhorter.

BLOSSOM one petal, bell-ſhaped, rather ſwelled at the baſe; border twelve-divided, equal.
Honey-cup twelve-celled, conſiſting of 12 ſcales, inſerted into the claws of the chives, approaching, covering the receptacle.

CHIVES. Twelve threads, the length of the bloſſom. Tips thick.

POINTAL. Seed-bud above, conical. Shaft ſimple, the length of the chives. Summits two, long, like briſtles, ſtraddling.

SEED VESSEL. Capſule two-celled.

SEEDS numerous, roundiſh, black.

SPECIFIC CHARACTER.

Codon foliis alternis, cordato-ovatis, acuminatis, ſetaceo-ſpinoſis; floribus ſubcapitatis, terminalibus.

Codon with alternate leaves, between heart-ſhaped and oval, tapered to the point, with ſpine-like briſtles; flowers grow nearly in heads, terminating the branches.

REFERENCE TO THE PLATE.

1. The Empalement.
2. A Bloſſom ſpread open, with the chives in their place.
3. The ſame ſhewn from the outſide.
4. The Seed-bud, Shaft and Summits.
5. The Seed-bud, cut tranſverſely.

As an intereſting deſideratum, this plant has ſtood long amongſt botanical collectors; but till the year 1801, it was never ſeen, in a vegetating ſtate, in Britain; at which period, it was introduced to our gardens, by Mr. Niven, from the Cape of Hope. It is not, we believe, (although conſidered hitherto as ſuch,) an annual; but rather, a half woody ſhrub, eaſily deſtroyed by moiſture. As the ſeed appears to ripen freely, although there ſeems no other mode of perpetuating the plant, we ſhall ſtand in no danger of loſing it; its attractions are, indeed, not great as to beauty, but much ſo as to ſingularity; ſince we have no plant to which it affines in general habit. The ſeeds ſhould be ſown on a gentle hot-bed, in March, and tranſplanted when about two inches high, into pots, to flower, which they will do about September. Our drawing was made at the Hammerſmith Nurſery. Having had the opportunity of examining the flowers, of more than twenty plants; we are convinced it has been wrong placed by Van Royen to decandria; for although many flowers may be found, even on the ſame plant, ſome with eight, others with ten chives, yet at leaſt 90 out of 100 have twelve; wherefore we have, without ſcruple, placed it to dodecandria.

2
1
4
5

PLATE CCCXXVI.

PHARNACEUM LINEARE.

Linear-leaved Pharnaceum.

CLASS V. ORDER III.

PENTANDRIA TRIGYNIA. Five Chives. Three Pointal.

GENERIC CHARACTER.

CALYX. Perianthium pentaphyllum; foliolis ſubovatis, concavis, patentibus, æqualibus, perſiſtentibus, intus coloratus, margine tenui.

COROLLA nulla; hinc calycis margo tenuis et calyx interne coloratus.

STAMINA. Filamenta quinque, ſubulata, longitudine calycis. Antheræ baſi bifidæ.

PISTILLA. Germen ovatum, trigonum. Styli tres, filiformes, longitudine ſtaminum. Stigmata obtuſa.

PERICARPIUM. Capſula ovata, obſoletè trigona, tecta, trilocularis, trivalvis.

SEMINA numeroſa, nitida, orbiculata, depreſſa, margine acuto cincta.

EMPALEMENT. Cup five-leaved; leaflets nearly egg-ſhaped, concave, ſpreading, equal, permanent, coloured within, with a thin edge.

BLOSSOM none; hence the edge of the cup is thin and the inſide of it is coloured.

CHIVES. Five-threads, awl-ſhaped, the length of the cup. Tips cleft at the baſe.

POINTALS. Seed-bud egg-ſhaped, three-ſided. Shafts three, thread-ſhaped, the length of the chives. Summits blunt.

SEED-VESSEL. Capſule egg-ſhaped, bluntly three-cornered, covered, three-celled, three valves.

SEEDS numerous, ſhining, orbicular, flattened, ſurrounded by a ſharp rim.

SPECIFIC CHARACTER.

Pharnaceum foliis linearibus, verticillatis; umbellis inequalibus; calycibus aurantiis; caule decumbente.

Pharnaceum with linear leaves, growing in whorls; umbels unequal; cups orange coloured; ſtem bending downwards.

REFERENCE TO THE PLATE.

1. The Cup, ſhewn from the front, with the chives.
2. The ſame, ſhewn from the hind part attached to the fruit-ſtalk.
3. The Seed-bud and Pointals, natural ſize.
4. The ſame, magnified.
5. The Seed-bud, cut tranſverſely, magnified.

THIS little plant much reſembles our Corn Spurry, or Spergula arvenſis, at firſt ſight. It is a native of the Cape of Good Hope, ſeldom grows more than ſix inches high, and is very apt to be deſtroyed by the damps of our winters. It ſhould be placed in the airyeſt part of the greenhouſe, and kept in light ſandy loam. To propagate it, the cuttings ſhould be put in, about the month of March, in the heat of a gentle hot-bed, or the bark-bed of the hot-houſe; the ſeeds are ſometimes perfected. It has been often introduced to us, but as often loſt; as it is not a plant of much ſhew, no great deal of pains has, hitherto, been taken for its preſervation. Our drawing was taken from a plant in the Hibbertian Collection, in the month of July, 1802.

Plantaccum lineare

PLATE CCCXXVII.

XERANTHEMUM ARGENTEUM.

Silvery Everlaſting-Flower.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

Receptaculum paleaceum. Pappus ſetaceus. Calyx imbricatus, radiatus; radio colorato.	Receptacle chaffy. Feather briſtly. Cup tiled, rayed; ray coloured. See Xeranthemum speciocissimum, V.I. Pl.LI.

SPECIFIC CHARACTER.

Xeranthemum fruticoſum; foliis lanceolatis, carinatis, ſericeis; floribus paniculatis, argenteis.	Everlaſting-flower with a ſhrubby ſtem; leaves lance-ſhaped, keeled, and ſilky; flowers grow in panicles, and ſilvery.

REFERENCE TO THE PLATE.

1. An hermaphrodite Floret, natural ſize.
2. The ſame, magnified.
3. An inner ſcale of the Empalement.
4. The Receptacle, cleared of the ſcales and florets.
5. A female Floret, magnified.
6. The Pointal of the above, natural ſize.
7. The ſame magnified.

This new ſpecies of Everlaſting-flower was introduced to us, at the ſame time, with the X. ſpirale of this work, Pl. CCLXII. by Montague Burgoyne, Esq. of Mark Hall, Eſſex, in the year 1801. It is a quick growing plant, and has flowered for the firſt time laſt April, when our drawing was taken. The flower ſtems grow to the length of eighteen inches, or more; and the buds, upon their firſt appearance, have a fine tint of fleſh colour, which, however, totally diſappears upon the expanſion of the flower. It is propagated by cuttings, ſeeds, (which ripen in this country,) or by parting the branches at the root, as it makes many from one baſe, which are eaſily ſeparated by paſſing a knife between them. It thrives beſt in ſandy peat with a ſmall portion of loam, and muſt be kept in an airy, dry part of the greenhouſe.

Erantheum argenteum

PLATE CCCXXVIII.

GERANIUM BUBONIFOLIUM.

Macedonian-Parſley-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, pentacoccus.	ONE POINTAL. Five Summits. Fruit furniſhed with long awns, five dry berries.

SPECIFIC CHARACTER.

Geranium foliis pinnatis, pinnis oppoſitis, lobatis, diſtantibus, lobis inciſo-dentatis, glabris; petalis emarginatis, albis; ſtaminibus quinque fertilibus; radice tuberoſa.	Geranium with winged leaves, wings oppoſite, lobed, diſtant, lobes deep cut and toothed, ſmooth; petals notched at the end, white, five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Cup cut and ſpread open.
2. The Chives and Pointal.
3. The Chives cut and ſpread open, magnified.
4. The Pointal, magnified.

THIS Geranium, from the Cape of Good Hope, is quite diſtinct in its habit, from moſt of the tuberous ſpecies; the leaflets or wings of the leaves being more hand-ſhaped, and at a greater diſtance from each other, than in any which has come under our obſervation; having much the appearance of thoſe of the plant from which we have derived its ſpecific title. The plant was introduced by Mr. Niven, to the Clapham Collection, in 1800; where our drawing was taken in the month of June, 1802. The cultivation as uſual, for the plants of this branch of the Geranium family.

Geranium bubonifolium

PLATE CCCXXIX.

PHARNACEUM LINEARE. *Var. flo. albo.*

Linear-leaved Pharnaceum. *White Var.*

CLASS V. ORDER III.

PENTANDRIA TRIGYNIA. Five Chives. Three Pointals.

ESSENTIAL GENERIC CHARACTER.

CALYX 5-phyllus. Corolla nulla.
CAPSULA 3-locularis, polyſperma.

CUP 5-leaved. Bloſſom none.
CAPSULE 3-celled, many-ſeeded.
See PHARNACEUM LINEARE. Pl. CCCXXVI. V.V.

SPECIFIC CHARACTER.

Pharnaceum foliis linearibus, verticillatis; umbellis inequalibus; calycibus albo-virentibus; caule decumbente.

Pharnaceum with linear leaves, growing in whorls; umbels unequal; cups whitiſh green; ſtem bending downwards.

REFERENCE TO THE PLATE.

1. A Flower.
2. The Cup and Chives.
3. The Seed-bud and Pointals, natural ſize.
4. The ſame, magnified.
5 The Seed-bud, cut tranſverſely, magnified.

WE have given this variety of the linear-leaved Pharnaceum, at the ſame time with the orange-coloured, as being the only two Cape ſpecies, at preſent, in our gardens. It is equally tender and delicate with its fellow, is equally difficult to propagate; and was introduced, this laſt time, to the Hibbertian Collection in 1800, by Mr. Niven, with it.

1
2
3
4
5

PLATE CCCXXX.

NYMPHÆA STELLATA.

Starr'd Water-Lily.

CLASS XIII. ORDER I.

POLYANDRIA MONOGYNIA. Many Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX 4, 5, ſeu 6-phyllus. Cor. polypetala. Bacca multilocularis, truncata.

CUP 4, 5 or 6-leaved. Bloſſ. many petals. Berry many-celled, appearing cut off at top.
See NYMPHÆA CŒRULEA, Pl. CXCVII. Vol. III.

SPECIFIC CHARACTER.

Nymphæa foliis ſubrotundis, ſinuatis, ſubtus purpuraſcentibus; lobis divaricatis, acutis; calyce tetraphyllo, petalis acutis cœruleis longiore.

Water-lily with nearly round leaves, ſcollopped and purpliſh underneath; lobes ſtraddling and pointed; cup four-leaved, longer than the pointed, blue petals.

REFERENCE TO THE PLATE.

1. The Cup diveſted of the petals.
2. A Chive, natural ſize.
3. The ſeed-veſſel, nearly arrived to maturity.
4. The ſame, cut tranſverſely.

THIS fine ſpecies of Water-lily is a native of the Eaſt Indies, on the Malabar coaſt; and has been given by Rheed, in his Hortus Malabaricus, Vol. II. p. 53. fig. 27. At firſt ſight, it has much the appearance of N. cœrulea, but upon cloſer inſpection it is found to poſſeſs many ſtrongly differing characters, viz. In this, the under part of the leaves are purpliſh, the lobes ſtraddle; in that, they are tiled, or lay upon each other; in N. ſtellata the petals or chives ſeldom exceed ten; whereas, the N. cœrulea has an indefinite number of both. The roots, likewiſe, are perfectly diſtinct; in N. cœrulea the diverging roots proceed from the lower part of the bulb, from whence the leaves iſſue, but in N. ſtellata from the top, leaving below them a ſmooth top-ſhaped bulb. The parts which compoſe the ſummit, or rather the ſummits, (for indeed we ſhould conſider them, if it lay with us, as diſtinct pointals,) are expanded horizontally when the flower is in its perfect ſtate, forming a ſtar like appearance, whence its ſpecific name. It is much tenderer than N. cœrulea, and will not flower but in ſtrong heat. Mr. Anderſon informs us that the plants which have produced perfect ſeeds this year, were from ſeeds, received by A. B. Lambert, Eſq. (communicated by Dr. Roxburgh from India) in the month of March, and raiſed by him for the collection of J. Vere, Eſq. Kenſington Gore, where our drawing was made in August.

1

2

3

4

Nymphæa stellata

PLATE CCCXXXI.

XYLOPHYLLA FALCATA.

Cymitar-ſhaped-leaved Xylophylla.

CLASS XXI. ORDER III.

MONŒCIA TRIANDRIA. Chives and Pointals ſeparate. Three Chives.

GENERIC CHARACTER.

* *Maſculi flores.*

CALYX. Perianthium monophyllum, tripartitum, coloratum; laciniis ovatis, patulis, ovatis.

COROLLA. Petala tria, ovata, concava.

STAMINA. Filamenta tria, breviſſima, baſi approximata. Antheræ ſubrotundæ, didymæ.

* *Feminei flores* in eodem faſciculo cum maſculis.

CALYX. Perianthium ut in mare.

COROLLA ut in mare.

Nectarium corpuſculis glanduloſis germen ambientibus.

PISTILLUM. Germen ſubrotundum, triſulcatum. Styli tres, patuli, bifidi. Stigmata obtuſa.

PERICARPIUM. Capſula trigona, triſulca, trilocularis; loculis bivalvibus.

SEMINA ſolitaria.

* *Male flowers.*

EMPALEMENT. Cup one leaf, three divided, coloured; ſegments egg-ſhaped, ſpreading, oval.

BLOSSOM. Petals three, egg-ſhaped, concave.

CHIVES. Threads three, very ſhort, and approaching at the baſe. Tips roundiſh, double.

* *Female flowers* in the ſame tuft with the males.

EMPALEMENT. Cup as in the male.

BLOSSOM as in the male.

Honey-cup is formed of ſmall glandular bodies ſurrounding the ſeed-bud.

POINTAL. Seed-bud roundiſh, three-furrowed. Shafts three, ſhort. Summits blunt.

SEED-VESSEL. Capſule three-ſided, three-furrowed, three cells; cells two-valved.

SEEDS ſolitary.

SPECIFIC CHARACTER.

Xylophylla foliis ſparſis, integris, falcatis, crenatis; crenis remotis, floriferis; floribus rubris.

Xylophylla with leaves ſcattered on the ſtem, entire, cymitar-ſhaped and ſcolloped; the ſcollops diſtant, and having the flowers on them; flowers red.

REFERENCE TO THE PLATE.

1. A male flower, magnified.
2. The bloſſom of male flowers, ſpread open, with the honey-cups.
3. A Female flower, magnified.
4. The Germ from a female flower, cut tranſverſely, magnified.

IT ſhould ſeem that this Genus has not been obſerved with ſufficient accuracy, at leaſt thoſe plants known to us, and which have been treated of as belonging to the claſs Pentandria. The preſent one, for inſtance, which is unqueſtionably the plant deſigned by Swartz, Commelin, Seba, &c. and is acknowledged by Swartz to be triandrous and monœcious, yet that it ſhould be continued in the Kew Catalogue and by Willdenow, &c. to Pentandria, is aſtoniſhing. We have no heſitation in declaring our opinion that the whole genus as it now ſtands ought to be thrown to Phyllanthus. But, as the title Xylophylla is ſo well known for theſe plants; we have thought it more ſafe to give the Genus thoſe characters the plants bear under their true Claſs and Order, than make any alteration in it. The Xylophylla falcata is a native of the Weſt India Iſlands, and has been long cultivated in our hot-houſes; ſo long ago as the year 1739. It is a tender plant, and will not flower without the aſſiſtance of the bark-bed; is eaſily propagated by cuttings; grows beſt in ſandy peat, and flowers in Auguſt. Our drawing was made at the Hammerſmith Nurſery.

Pl. 351.

1

2

3

4

Asclepias falcata

PLATE CCCXXXII.

PROTEA ANEMONIFOLIA.

Anemony-leaved Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA 4-fida ſeu 4-petala. Antheræ lineares, inſertæ petalis infra apicem. Calyx proprius nullus. Semina ſolitaria.

BLOSSOM 4-cleft or 4 petals. Tips linear, inſerted into the petals below the point. Empalement proper, none. Seeds ſolitary.

See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis pinnatis, pinnis planis, cuneiformibus, ſub apice inciſo-dentatis; capitalis terminalibus; ſquamis calycinis lanceolatis, glabris; floribus luteis.

Protea with winged leaves, wings flat, wedge-ſhaped, deeply toothed at the point; flower heads terminal; ſcales of the cup lance-ſhaped, ſmooth; flowers yellow.

REFERENCE TO THE PLATE.

1. Flower complete, with its Seed-bud attached.
2. One of the petals of the flower, magnified.
3. Seed-bud, Shaft and Summit, the Summit detached and magnified.

THE Protea Anemonifolia is one of the only three ſpecies of the Genus, we have, yet, received from New Holland. It was introduced to us, from thence, in the year 1792, by Meſſrs. Lee and Kennedy, Hammerſmith; is a hardy green-houſe plant; grows to the height of three, or four feet; may be propagated by cuttings, and flowers in Auguſt. It thrives beſt in a mixture of light ſandy loam, and peat earth, of each an equal quantity.

2
3

PLATE CCCXXXIII.

SAGITTARIA LANCIFOLIA.

Lance-leaved Arrowhead.

CLASS XXI. ORDER VII.

MONŒCIA POLYANDRIA. Chives and Pointals ſeparate. Many Chives.

GENERIC CHARACTER.

* *Maſculi flores* plures.

CALYX. Perianthium triphyllum; foliolis ovatis, concavis, perſiſtentibus.

COROLLA. Petala tria, ſubrotunda, obtuſa, plana, patientia, calyci triplo majora.

STAMINA. Filamenta plurima (viginti quatuor ſæpe), ſubulata, in capitulum congeſta. Antheræ erectæ, longitudine calycis.

* *Feminei flores* pauciores, infra maſculos.

CALYX. Perianthium ut in mare.

COROLLA. Petala tria, ut in mare.

PISTILLA. Germina numeroſa, compreſſa, in capitulum congeſta, extrorſum gibba, deſinentia in ſtylos breviſſimos. Stigmata acuta, perſiſtentia.

PERICARPIUM nullum. Receptaculum globoſum, ſemina in globum colligens.

SEMINA numeroſa, oblonga, compreſſa, cincta longitudinaliter margine membranaceo, lato, hinc gibbo, utrinque acuminato.

* *Male flowers* many.

EMPALEMENT. Cup three leaves; leaflets egg-ſhaped, concave, remaining.

BLOSSOM. Three petals, roundiſh, blunt, flat, ſpreading, three times the ſize of the cup.

CHIVES. Threads many (often twenty-four), awl-ſhaped, collected into a little head. Tips upright, the length of the cup.

* *Female flowers* fewer, beneath the males.

EMPALEMENT. Cup as in the male.

BLOSSOM. Three petals, as in the male.

POINTALS. Seed-buds numerous, flattened, forming a little head, hunched on the outerſide, ending in very ſhort ſhafts. Summits pointed, remaining.

SEED-VESSEL none. Receptacle globular, ſupporting the ſeeds in the form of a globe.

SEEDS numerous, oblong, flattened, ſurrounded lengthways by a broad ſkinny border, hunched on one ſide, tapering to each end.

SPECIFIC CHARACTER.

Sagittaria foliis lanceolato-ovatis. — Arrowhead with leaves between lance and egg-ſhaped.

REFERENCE TO THE PLATE.

1. The whole plant in miniature.
2. A male flower diveſted of the petals.
3. One of the Chives, magnified.
4. A female flower without its petals.
5. The receptacle with its pointals, cut perpendicularly, magnified.

ALL the ſpecies of this Genus of plants are aquatic, or water plants, and differ but little from each other, in their ſpecific characters. Our preſent ſubject is a native of the Weſt India Iſlands, and requires the atmoſphere of a hot-houſe to induce it to flower. The bloſſoms, on the lower part of the flower-ſtem, are all females; and thoſe on the upper part, males; they are all exceedingly delicate, as either wind, or wet, deſtroys them. It increaſes by offsets from the root; but the ſeeds do not ripen in this country. It muſt be kept in a pan or tub half filled with earth, and the other half with water, but does not require to be plunged in the tan-bed.

Our figure was taken from a plant which flowered this year 1803 (and, for the firſt time in Britain, as we are informed by Mr. Anderſon), in the month of July, in the Collection of J. Vere, Eſq. Kenſington Gore.

Ranunculus lanuginosus

PLATE CCCXXXIV.

STRUTHIOLA TOMENTOSA.

Downy-leaved Struthiola.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

PERIANTHIUM diphyllum. Corolla tubulosa, 4-fida. Nectarium glandulæ octo fauci circumpositæ. Semen unum subbaccatum.

CUP two leaved. Blossom tubular, 4 cleft. Honey-cup 8 glands, placed round the mouth of the blossom. One seed like a berry.
See STRUTHIOLA IMBRICATA, Pl. CXIII. Vol. II.

SPECIFIC CHARACTER.

Struthiola foliis ovatis, concavis, callosis, tomentosis, imbricatis; nectario duodecim partito.

Struthiola with egg shaped leaves, concave, callous, downy and tiled; honey-cup with twelve divisions.

REFERENCE TO THE PLATE.

1. The two leaves of the Empalement, magnified.
2. A Flower complete, magnified.
3. A Blossom cut open, to shew the situation of the chives, magnified.
4. A Seed-bud, with the Shaft and Summit, a little magnified.

THE Clapham Collection is the only one in which this curious species of Struthiola is, at present, to be seen. It was sent by Mr. Niven, from the Cape, in 1799, and flowered, for the first time, last year 1802, in the month of August, when our drawing was made. It is a tender Green-house plant, as are most of this natural order, from that country; being susceptible of too great moisture, either when exposed to the open air during heavy rains in summer, or from over watering in winter. Wherefore they are best preserved by sheltering them in an airy situation during summer, and giving them but little water in winter. It is encreased by cuttings, taken off in the month of May, planted in a pot, filled to the margin with sandy loam, and plunged under a hand-glass, in a shady border, without watering the loam. It grows most flourishing in a mixture of sandy peat and loam; the peat about one third part.

Pl. 354

Anthuela tomentosa

PLATE CCCXXXV.

GLADIOLUS PYRAMIDATUS.

Pyramidal-ſpiked Gladiolus.

CLASS III. ORDER I.

TRIANDRIA MONOGYNIA. Three Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla ſexpartita, ringens. Stamina adſcendentia.	Blossom ſix-divided, gaping. Chives aſcending.

See Gladiolus roseus, Pl. XI. Vol. I.

SPECIFIC CHARACTER.

Gladiolus foliis enſiformibus, utrinque attenuatis, glabris; ſpathis præmorſis; ſpicis pyramidatis; floribus imbricatis, ſubringentibus.	Gladiolus with ſword-ſhaped leaves, tapered to both ends, and ſmooth; ſheaths appear bitten at the ends; ſpikes pyramid-ſhaped; flowers tiled, a little gaping.

REFERENCE TO THE PLATE.

1. Part of a leaf.
2. The two Valves of the Sheath.
3. A Bloſſom cut open, to ſhew the inſertion of the Chives.
4. The Seed-bud, Shaft and Summits.

This fine Gladiolus from the Cape of Good Hope, we believe, has not flowered, or is to be found, in any other collection than that of the Dowager Lady De Clifford, Paddington; where our drawing was taken in Auguſt, this year, 1803. It grows to the height of three feet; and the flowers continue to blow, from four to ſix at a time in ſucceſſion, from the baſe of the ſpike. It is a hardy bulb, and has every appearance of being a free blower.

Gladiolus pyramidalis.

PLATE CCCXXXVI.

ANCHUSA CAPENSIS.

Cape Alkanet.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium quinquepartitum oblongum, teres, acutum, perſiſtens.

COROLLA monopetala, infundibuliformis: tubus cylindricus, longitudine calycis; limbus ſemiquinquefidus, obtuſus, erecto-patens; faux clauſa ſquamulis quinque, convexis, prominentibus, oblongis, conniventibus.

STAMINA. Filamenta quinque, breviſſima, in fauce corollæ. Antheræ oblongæ, incumbentes, tectæ.

PISTILLUM. Germina quatuor. Stylus filiformis, longitudine ſtaminum. Stigma obtuſum, emarginatum.

PERICARPIUM nullum; Calyx major, erectus, in ſinu continens ſemina.

SEMINA quatuor, oblongiuſcula, obtuſa, gibba.

EMPALEMENT. Cup five-parted, oblong, cylindrical, pointed, remaining.

BLOSSOM one petal, funnel-ſhape; tube cylindric, the length of the cup; border half-five-cleft, obtuſe, from erect ſpreading; throat cloſed with five ſmall ſcales, convex, prominent, oblong, converging.

CHIVES. Five very ſhort threads in the throat of the bloſſom. Tips oblong, incumbent, covered.

POINTALS. Seed-buds four. Shaft thread-ſhaped, the length of the chives. Summit blunt, notched at the end.

SEED-VESSEL none; the Cup larger and erect, containing the ſeeds in its boſom.

SEEDS four, ſomewhat oblong, blunt, hunched.

SPECIFIC CHARACTER.

Anchuſa foliis lanceolatis, villoſis, calloſis; floribus racemoſo-paniculatis, cœruleis.

Alkanet with lance-ſhaped leaves, hairy, and callous; flowers grow in bunches nearly panicled, blue.

REFERENCE TO THE PLATE.

1. The Empalement, natural ſize.
2. The ſame, magnified.
3. The Seed-buds and pointal, natural ſize.
4. The ſame magnified.
5. A Bloſſom cut open, magnified, to ſhew the ſcales upon the mouth, with the ſituation of the chives.

THIS is the only ſpecies of the Genus we have yet ſeen from the Cape of Good Hope; and, as it appears that Thunberg diſcovered but this ſolitary inſtance, which he has given in his Prodromus Plantarum Capenſium, under the ſpecific title we have here adopted, from him; he, perhaps, thought himſelf warranted in ſo naming it; although naming plants from the country where they are firſt found requires but little reaſoning to ſhew its impropriety. It is a hardy green-houſe plant, but from all appearance, like the moſt of this natural order, rather ſhort-lived. It grows freely in a mixture of loam and ſandy peat; and there is every appearance that the ſeeds will ripen, the only method by which there is any likelihood of its being perpetuated.

The plant, before flowering, does not grow above ſix inches high; but the flower-ſtem riſes near eighteen inches. Our figure was taken from a plant in the Hibbertian Collection; where it flowered for the firſt time in England in the month of July 1803; having been ſent home, by Mr. Niven, from the Cape, in 1800.

Cynoglossum capensis

PLATE CCCXXXVII.

PROTEA TRITERNATA.

Cluſter-headed Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA quadrifida ſeu quadripetala. Antheræ lineares, inſertæ petalis infra apicem. Calyx proprius nullus.
SEMINA ſolitaria.

BLOSSOM four-cleft or four petals. Tips linear, inſerted into the petals below the point. Empalement proper, none.
SEEDS ſolitary.
See PROTEA FORMOSA, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis bipinnatis, brevibus, filiformibus, confertis, glabris; floribus terminalibus, umbellatis; pedunculis bracteis, capitulis longioribus; ſquamis calycinis ſubulatis, hirtis.

Protea with doubly winged leaves, ſhort, thread-ſhaped, crowded and ſmooth; flowers terminate the branches in umbels; fruit ſtalks with floral leaves, and longer than the ſmall heads; ſcales of the cup awl-ſhaped and hairy.

REFERENCE TO THE PLATE.

1. A Leaf.
2. A Flower.
3. One of the Petals of the flower, magnified.
4. The Seedbud, Shaft and Summit, the Summit detached, magnified.
5. The common Cup of one of the ſmall heads of flowers.

THIS beautiful divided leaved Protea has been named, as above, by Thunberg, in his Diſſertatio de Protea, n. 7, and in his Prodromus plantarum capenſium 25. It is rather a delicate plant, and ſubject to loſe the lower leaves from the ſtem, which takes ſomething from the beauty of it's habit. The young leaves, when they firſt appear, have a downy character, which diſappears as they grow firm. The ſtem has likewiſe, in its young ſtate, a tendency to downineſs, which is not diſcovered on the old wood; and is, where the leaves are extant, quite covered by them. It grows to the height of three feet, is propagated by cuttings, and flowers in the month of July. Our figure was taken from a plant in the Hibbertian Collection, which was raiſed from Cape ſeeds in 1800, ſent from thence by Mr. Niven.

1
2
3
4
5

PLATE CCCXXXVIII.

GERANIUM CORONOPIFOLIUM.

Buck's-horn-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus, penta-coccus.

ONE POINTAL. Five ſummits. Fruit furniſhed with long awns, five dry berries.
See GERANIUM GRANDIFLORUM, Pl. XII. Vol. I.

SPECIFIC CHARACTER.

Geranium foliis ſubcuneatis, apice inciſo-dentatis, caneſcentibus, petiolis longiſſimis; pedunculis ſubtrifloris; corollis pallidè violaceis; caulê ſuffruticoſo; ſtaminibus quinque fertilibus.

Geranium with nearly wedge-ſhaped leaves, deeply toothed at the end, whitiſh and very long foot-ſtalks; flower ſtems moſtly three-flowered; bloſſoms pale purple; ſtem rather woody; five fertile chives.

REFERENCE TO THE PLATE.

1. A Flower and a Bud from a ſeedling variety of this plant, by an intermixture of the farina of Geranium tricolor.
2. The Cup, which is ſolid and five-leaved.
3. The Chives and Pointal, magnified.
4. The ſame cut open, magnified.
4. The Seed-bud, Shaft and Summits, magnified.

THE Geranium coronopifolium is one of thoſe ſpecies we may fairly denominate biennial; for ſuch is certainly the G. tricolor, G. Oenothera, G. tomentoſum, &c. and as ſuch muſt be propagated every year to have a ſucceſſion of them. It is readily increaſed by putting the cuttings into ſmall pots, and plunging them in the heat of a hot-bed or hot houſe, early in the month of March; which plants will flower in September. It was firſt introduced to the Kew Gardens by Mr. Maſſon in 1792. The plant is very delicate, and ſhould be kept in a dry part of the green-houſe, in a mixture of ſandy peat and rich earth. Our figure is from a plant in the Hibbertian Collection; where, likewise, we found the variety of which a flower is given on the plate. Mr. Allen informs us, he procured the Var. by approximating a plant of this ſpecies to the G. tricolor; firſt impregnating the ſummits of the flower of G. coronopifolium, with the pollen from the tips of the G. tricolor, a method much practiſed of late for the production of varieties, in many genera.

1

2

3

4

5

croncpufolium

PLATE CCCXXXIX.

LOBELIA CORONOPIFOLIA.

Buck's-horn-leaved Lobelia.

CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers ſimple.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-fidus. Corolla 1-petala, irregularis. Capſula infera, 2-ſeu 3-locularis.	Cup 5-cleft. Bloſſom 1-petal, irregular. Capſule beneath, 2 or 3-celled.

See Lobelia pinifolia, Pl. CCLXXIII. Vol. IV.

SPECIFIC CHARACTER.

Lobelia foliis lanceolatis, dentatis, glabris; floribus ſolitariis, axillaribus; pedunculis elongatis; ſtigmatibus obtuſis, piloſis.	Lobelia with lance-ſhaped leaves, toothed and ſmooth; flowers ſolitary, from the baſe of the leaves; foot-ſtalks lengthened; ſummits blunt, hairy.

REFERENCE TO THE PLATE.

1. The Chives magnified.
2. The Cup, Chives, and Pointal, the Summit detached, magnified.

The character of moſt of the Lobelias from the Cape, and elſewhere, is, that they are either annual or biennial, and can ſcarcely be conſidered as ſhrubs. Our preſent ſubject is a biennial from the Cape of Good Hope, flowers the firſt year from the ſeed, if ſown in March, and may be preſerved a ſecond year; but, as it ſeeds ſo abundantly, it is ſcarce worth the pains to preſerve it, as the plants of one year's growth are ſo much handſomer than thoſe preſerved through the winter. It flowers from July till October, and ſhould be kept in ſandy peat earth.

The L coronopifolia was introduced to the Kew Collection in 1787, by Mr. F. Maſſon, and is now in moſt collections.

1
2

PLATE CCCXL.

LOBELIA GRACILIS.

Slender-ſtemed Lobelia.

CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers simple.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-fidus. Corolla monopetala, irregularis. Capſula infera, 2-ſeu 3-locularis.	Cup 5-cleft. Bloſſom one petal, irregular. Capſule beneath, 2 or 3-celled. See Lobelia finifolia, Pl. CCLXXIII. Vol. IV.

SPECIFIC CHARACTER.

Lobelia foliis inferioribus ovatis, ſinuatis, ſuperioribus lanceolatis, dentatis; petalis duobus minoribus barbatis; floribus ſpicatis; ſtigmatibus bifidis.	Lobelia with the lower leaves egg-ſhaped and ſcollopped, the upper ones lance-ſhaped and toothed; the two ſmaller petals bearded; flowers grow in ſpikes; ſummits two-cleft.

REFERENCE TO THE PLATE.

1. A Bloſſom cut open, with the chives in their place, magnified.
2. The Cup, Seed-bud, Shaft and Summit; the Summit detached and magnified.

This moſt delicate little plant, of which our figure repreſents the whole, was raiſed in 1801, from Cape ſeeds, ſent by Mr. Niven from thence, for the Clapham gardens; where our drawing was made this year, 1803, in the month of Auguſt. It is an annual plant, producing its ſeeds freely, as do moſt ſpecies of this genus, which ſhould be ſown in the month of March, in light ſandy peat, and tranſplanted about May.

1
2

PLATE CCCXLI.

PHASEOLUS CARACALLA.

Snail-Flower Kidney-Bean.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Chives in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, bilabiatum; labio ſuperiori emarginato, inferiore tridentato.

COROLLA papillionacea.

Vexillum, cordatum, obtuſum, emarginatum, reclinatum, lateribus reflexis.

Alæ, ovatæ, longitudine vexilli, unguibus longis inſidentes.

Carina, anguſta, ſpiraliter contra ſolem revoluta.

STAMINA. Filamenta diadelpha, (ſimplex et novemfidum) intra carinam, ſpiralia. Antheræ decem, ſimplices.

PISTILLUM. Germen oblongum, compreſſum villoſum. Stylus filiformis, ſpiraliter inflexus, ſuperne pubeſcens. Stigma obtuſum, craſſiuſculum, villoſum.

PERICARPIUM. Legumen longum, rectum, coriaceum, obtuſum cum acumine.

SEMINA reniformia, oblonga, compreſſa.

EMPALEMENT. Cup one leaf, two-lipped, upper lip notched at the end, lower three-toothed.

BLOSSOM butterfly-ſhaped.

Standard, heart-ſhaped, blunt, notched at the top, reclined, reflexed at the the ſides.

Wings, egg-ſhaped, the length of the Standard, terminating in long claws.

Keel, narrow, twiſted ſpirally contrary to the ſun.

CHIVES. Threads in two ſets, (ſimple and nine-cleft,) within the keel, ſpiral. Tips ten, ſimple.

POINTAL. Seed-bud oblong, flattened, hairy. Shaft thread-ſhaped, ſpirally bent inwards, downy above. Summit blunt, thickiſh, hairy.

SEED VESSEL. A long pod, ſtraight, leathery, blunt with a point.

SEEDS kidney-ſhaped, oblong, flattened.

SPECIFIC CHARACTER.

Phaſeolus caule volubili; vexillis, carinaque ſpiraliter convolutis.

Kidney-bean with a twining ſtem; ſtandards and keel ſpirally twiſted from the left to the right.

REFERENCE TO THE PLATE.

1. The Cup.
2. The Standard.
3. One of the wings, ſhewn from the outſide.
4. One of the wings, ſhewn from the inſide.
5. The Keel.
6. The Chives.
7. The Pointal.

As a ſingular vegetable production, we have given a ſpecimen of this moſt curious flower, but not as a novelty, as it is, certainly, rather common, the ſeeds having frequently been brought to us from Portugal, (to which country it was firſt introduced from Braſil in South America), ever ſince the year 1690. It is a climbing plant and muſt be kept in the hothouſe, is propagated by ſeeds or cuttings, grows to the height of 12 or 14 feet, and ſhould be planted in rich earth. The flowers are produced about Auguſt; they are very fragrant, but have not much duration, and the plant has much the reſemblance of the common ſcarlet kidney-bean.

Dolichos Caracalla

PLATE CCCXLII.

COBBEA SCANDENS.

Climbing Cobbea.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, ſemiquinquefidum; laciniis cordatis, mucronatis, patentibus, perſiſtens.

COROLLA monopetala, campanulata, verſus baſin arctata, quinquefida; laciniis concavis, trilobis, ciliatis; ſquamulæ quinque lanatæ, ad baſin ſinus tubi, conniventes.

Nectarium, corpus carnoſum, quinquangulare, decem ſulcatum, germen cingens.

STAMINA. Filamenta quinque, ſquamulis corollæ orta, declinata. Antheræ incumbentes.

PISTILLUM. Germen ovatum, ſulcatum. Stylus filiformis, declinatus, ſtaminibus longior. Stigmata tria, plana, recurvata.

PERICARPIUM. Capſula oblonga, trilocularis, trivalvis.

SEMINA plurima, valvulis affixa, compreſſa, imbricata.

EMPALEMENT. Cup one-leaf, half five-cleft; ſegments heart-ſhaped, ending in a point, ſpreading, perſiſtent.

BLOSSOM one-petal, bell ſhaped, narrowed towards the baſe, five-cleft; ſegments concave, three-lobed, fringed; five woolly ſcales at the baſe of the boſom of the tube cloſing upon each other.

Honey-cup, a fleſhy body, five-angled, ten-furrowed, embracing the ſeed-bud.

CHIVES. Five threads, ariſing from the ſcales of the bloſſom, declined. Tips lying upon the threads.

POINTAL. Seed-bud egg-ſhaped, furrowed. Shaft thread-ſhaped, declined, longer than the threads. Summits three, flat, turned back.

SEED-VESSEL. Capſule oblong, three cells, three valves.

SEEDS many, fixed to the valves, flat, tiled.

SPECIFIC CHARACTER.

Cobbea foliis conjugatis, cirrhoſis; floribus ſolitariis, pedunculis longiſſimis; caule ſcandenti.

Cobbea with conjugate leaves terminating in a tendril; flowers ſolitary, foot-ſtalks very long; ſtem climbing.

REFERENCE TO THE PLATE.

1. A Bloſſom cut and ſpread open, with the Chives in their place.
2. The Empalement, Honey cup, Seed-bud, Shaft and Summits.

THE ſpecimen, from which our drawing was taken, was communicated by Mrs Long, from the Collection of the Honourable Charles Long, of Bromley Hill, Kent; where, we believe, the only plant of this fine Genus is at preſent to be found in Britain; and where it has flowered, for the firſt time, this year, in the month of September, 1803. It is a native of the Eaſt Indies, and muſt be kept as a hot-houſe plant; is propagated by cuttings, and thrives in rich earth; will grow, if permitted, to the height of twenty feet or more, and is ſtill in flower this preſent month of November.

1
2

PLATE CCCXLIII.

BLANDFORDIA CORDATA.

Heart-ſhape-leaved Blandfordia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, ſemiquinquefidum; laciniis concavis, ovatis, obtuſis, erectis; perſiſtens.

COROLLA. Petala quinque, oblongo-linearia, ſubtruncata, patentia, calyci inſerta.
Nectarium urceolatum, membranaceum, germen cingens; limbo quinque-lobo, laciniis clavatis, capitatis.

STAMINA. Filamenta nulla. Antheræ quinque, ſubrotundæ, didymæ; nectarii margini, inter lacinias limbi, affixæ.

PISTILLUM. Germen ſubrotundum. Stylus breviſſimus, erectus. Stigma obſoletum.

PERICARPIUM. Capſula oblonga, unilocularis, bivalvis.

SEMINA plurima, minuta, glabra.

EMPALEMENT. Cup one leaf, half-five-cleft; ſegments concave, egg-ſhaped, blunt, upright; remaining.

BLOSSOM. Five petals, oblong-linear, appearing rather cut off at the ends, ſpreading, inſerted into the cup.
Honey-cup pitcher-ſhaped, ſkinny, ſurrounding the ſeed-bud; border five-lobed, ſegments club-ſhaped, and headed.

CHIVES. Threads none. Tips five, roundiſh, double; fixed, between the ſegments of the border, upon the margin of the honey-cup.

POINTAL. Seed-bud roundiſh Shaft very ſhort, upright. Summit obſolete.

SEED-VESSEL. Capſule oblong, one cell, two valves.

SEEDS many, ſmall, ſmooth.

SPECIFIC CHARACTER.

Blandfordia foliis cordatis, reticulatis, crenato-dentatis, floribus ſpicatis.

Blandfordia with leaves heart-ſhaped, netted, and between ſcolloped and toothed; flowers grow in ſpikes.

REFERENCE TO THE PLATE.

1. The Cup, natural ſize.
2. The ſame, magnified.
3. A Petal, magnified.
4. The Honey-cup, with the Chives, magnified.
5. The ſame, ſpread open, ſhewn from the outſide.
6. The ſame, ſhewn from the inſide.
7. The Seed-bud, natural ſize.
8. The ſame, magnified.

THE Blandfordia cordata was firſt obſerved by Mr. J. Fraſer, in the year 1786, on the banks of the Savannah river, near its ſource, in Georgia, North America; but was not introduced to us until the year 1800, when it was brought to England, amongſt many other novelties, by that gentleman. It is, as are moſt of the plants of that country, rather too tender to reſiſt the ſeverity of our winters; and ſhould be protected, either in the green-houſe, or in the cooleſt and ſhadieſt part of the hot-houſe; where, if it is kept the year through, it will flouriſh, and flower about the month of June. It is increaſed by parting the roots about April; delights in moiſture and ſhade; thriving moſt in a light peat ſoil, with a ſmall mixture of ſandy loam. This plant, from its general habit, would at firſt ſight be taken for a ſpecies of Tiarella, or Heuchera, to both which it bears great reſemblance, being all, likewiſe, natives of the ſame clime; but the ſtrongly differing characters, in the parts of fructification, prevent its being placed to either of thoſe genera. The honey-cup, it is true, might, perhaps, with reason, be conſidered as the connected threads of ten chives, and what we take to be the ſegments of its border, ſet down as ſo many ſterile ones to make up this number. Thus, the plant would be tranſmuted to the XVI claſs; but, from our beſt judgment, we have placed it, as above, in the V.

Our figure is from a ſpecimen communicated by the Right Hon. the Marquis of Blandford, from his magnificent gardens at White Knights, near Reading, Berks. Little need be urged for the propriety of our naming a plant from the Marquis of Blandford; and thus, dedicating this ſmall part of our labours to his lordſhip; as few, at preſent, patronize the ſcience, through all its branches, with ſo much vigour and liberality, or who have equal knowledge in its theory and practice.

Saurodia cordata

PLATE CCCXLIV.

EPIDENDRUM ENSIFOLIUM.

Sword-ſhaped-leaved Epidendrum.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

ESSENTIAL GENERIC CHARACTER.

NECTARIUM turbinatum, obliquum, reflexum.	HONEY-CUP top-ſhaped, oblique and reflexed. See Pl. XIII. Vol. I. EPIDENDRUM COCHLEATUM.

SPECIFIC CHARACTER.

Epidendrum ſcapo tereti, lævi; foliis enſiformibus; petalis lanceolatis glabris; labio lanceolato, recurvato, maculato.	Epidendrum with a round ſmooth ſtem; leaves ſword-ſhaped; petals lance-ſhaped, ſmooth; lip lance-ſhaped, recurved and ſpotted.

REFERENCE TO THE PLATE.

1. The lip, detached from the flower.
2. A Flower from which the lip has been ſeparated.

THE Sword-ſhaped-leaved Epidendrum is a native of China and Japan, was cultivated, before 1792, in the gardens of the Marchioneſs of Rockingham, at Hillindon, Middleſex. It has more the habit and character of Limodorum than Epidendrum, to which genus it was firſt placed; and, like the Epidendrum ſinense of this work, Plate CCXVI. Vol. III. requires but little heat to keep it in health; preferring a ſandy loam to any other matter, for its nouriſhment. It, like the forenamed, and ſeveral other ſpecies of this genus, or rather of the genus Limodorum, not being thick-leaved, or paraſitic, where indigenous, are of conſequence much eaſier preſerved and increaſed than thoſe of that deſcription. Its flowers, which are produced in September or October, are very fragrant, particularly in the evening, continue in perfection above a month. It is propagated by parting the roots in the month of May.

Our drawing was made from a plant in the Hibbertian Collection.

Pl. 66

Cypripedium ensifolium

PLATE CCCXLV.

HYACINTHUS CORYMBOSUS.

Linear-leaved Cape Hyacinth.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX nullus.

COROLLA monopetala, campanulata; limbus ſexfidus, reflexus.
Nectarium; pori tres melliferi ad apicem germinis.

STAMINA. Filamenta ſex, ſubulata, breviora. Antheræ conniventes.

PISTILLUM. Germen ſuperum, rotundo-trigonum, triſulcum. Stylus ſimplex, corolla brevior. Stigma obtuſum.

PERICARPIUM. Capſula ſubrotunda, triquetra, trilocularis, trivalvis.

SEMINA bina (ſæpius,) ſubrotunda.

EMPALEMENT none.

BLOSSOM one petal, bell-ſhaped; border ſix-cleft, reflexed.
Honey-cup, three honied pores at the tip of the ſeed-bud.

CHIVES. Six threads awl-ſhaped, ſhorter. Tips converging.

POINTAL. Seed-bud above, round-three-cornered, three-furrowed. Shaft ſimple, ſhorter than the bloſſom. Summit blunt.

SEED-VESSEL. Capſula roundiſh, three-ſided, three-celled, three-valved.

SEEDS in pairs (often,) roundiſh.

SPECIFIC CHARACTER.

Hyacinthus corollis infundibuliformibus, corymboſis, erectis; ſcapo foliis linearibus breviore.

Hyacinth with funnel-ſhaped bloſſoms, growing in a broad topped ſpike, upright; flower-ſtem ſhorter than the leaves, which are linear.

REFERENCE TO THE PLATE.

1. A Bloſſom, with the Chives in their place, one Chive detached, magnified.
2. The Seed-bud, Shaft and Summit, the Summit detached, magnified.

AMONGST the plants, of this natural order, from the Cape of Good Hope, we find ſuch an intermixture of character, in the different parts of fructification; that, if ſome latitude is not taken in referring them to ſome of the old genera, almoſt every freſh ſubject, we diſcover, would require a new one. This plant, although we have placed it to Hyacinthus, with thoſe that have gone before us, has juſter claims to Drimia, Polyanthes or Scilla; for it is wanting in the eſſential characters of Hyacinthus, being unfurniſhed with the honied pores, and having the chives inſerted into the tube of the bloſſom, three of which are, alternately, double the length of the others. To Drimia, a new genus of Profeſſor Jacquin, and a mutilation of Hyacinthus, it is moſt allied; but, we have not thought fit to alter its known ſtation, as, without doubt, the multiplication of genera, or altering the place of known plants, adds but to the difficulties of a moſt intricate, though pleaſing ſtudy. It is a hardy green-houſe bulb; delights in a mixture of peat earth and ſandy loam; increaſes by offsets, and flowers in October or November. Our figure was made from a plant in the Nurſery of Mr. Williams of Turnham Green, who firſt imported it in 1800. It is ſaid, by Koenig, to grow in paſture lands near the Cape town, and was firſt noticed there by him.

1

2

Crinthus corymbosus.

PLATE CCCXLVI.

CASUARINA STRICTA.

Upright Caſuarina.

CLASS XXI. ORDER I.

MONOECIA MONANDRIA. Chives and Pointal ſeparate. One Chive.

GENERIC CHARACTER.

* *Maſculi flores.*

CALYX. Amentum filiforme, imbricatum, ſquamis minutis, unifloris.

COROLLA. Squamulæ bipartitæ, ovatæ, minutæ.

STAMINA. Filamentum unicum, capillare, ſquama amenti longius. Anthera didyma.

* *Feminei flores* in eadem arbore.

CALYX. Amentum ovato-cylindricum; ſquamis ovatis, acutis, carinatis, ciliatis.

COROLLA nulla.

PISTILLUM. Germen minutum. Stylus filiformis, longus, exſertus, bifidus. Stigmata duo.

PERICARPIUM. Strobilus ſquamis bivalvibus, perpendiculariter dehiſcentibus.

SEMINA ſolitaria, conica, margine membranacea.

* *Male flowers.*

EMPALEMENT. Catkin thread-ſhape, tiled with ſmall one-flowered ſcales.

BLOSSOM. Scales two-parted, ovate, minute.

CHIVES. Thread one, hair-like, longer than the ſcale of the catkin. Tip double.

* *Female flowers* on the ſame plant.

EMPALEMENT. Catkin ovate-cylindric, with egg-ſhaped, acute, keeled, tiled ſcales.

BLOSSOM none.

POINTAL. Seed-bud minute. Shaft thread-ſhaped, long, without, two-cleft. Summits two.

SEED VESSEL. Cone with two-valved ſcales, ſplitting perpendicularly.

SEEDS ſolitary, conical, with a ſkinny edge.

SPECIFIC CHARACTER.

Caſuarina dioica ramulellis erectis; ſtrobilorum ſquamis inermibus; vaginis maſculis multifidis, glabris.

Caſuarina with chives and pointals diſtinct, and upright branchlets; ſcales of the cones naked, male ſheaths many-parted, ſmooth.

REFERENCE TO THE PLATE.

1. The Catkin, or terminal part of a male branchlet, magnified ſlightly.
2. The Shaft and Summit of a female floret.
3. The Cone, whilſt yet in flower.
4. The ſame magnified.

THE Caſuarina ſtricta is a native of New South Wales, and was introduced, by Meſſrs. Kennedy and Lee, in the year 1775. It is a hardy green-houſe plant, grows to the height of ten or twelve feet before it flowers, which is in November. It is perfectly dioicous; the male and female bloſſoms, never coming on the ſame plant, and either have little to recommend them for beauty; their ſingularity is what ſhould ſooner attract our notice. The two figures, on the plate, which are the male and female, were taken from two plants, in flower, at the ſame time, in the collection of the Dowager Lady de Clifford, Paddington. All the ſpecies, hitherto diſcovered, ſince the firſt, upon which the genus was formed, the C. equiſetifolia has, like this, the male and female parts of fructification on different plants; that only, being monoicous, or with the male and female parts on the ſame plant.

1

2

3

4

Juncus stricta

PLATE CCCXLVII.

SOPHORA CAPENSIS.

Vetch-leaved Sophora.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, breve, campanulatum, basi superne gibbum; ore quinque-dentato, obliquo, obtuso.

COROLLA papillionacea, pentapetala.

Vexillum oblongum, sensim latius, rectum, lateribus reflexis.

Alæ duæ, oblongæ, basi appendiculatæ, longitudine vexilli.

Carina dipetala; petalis alis conformibus, marginibus inferioribus approximatis, navicularibus.

STAMINA. Filamenta decem, distincta, parallela, subulata, longitudine corollæ, intra carina recondita. Antheræ minimæ, assurgentes.

PISTILLUM. Germen oblongum, teres. Stylus magnitudine et situ staminum. Stigma obtusum.

PERICARPIUM. Legumen longissimum, tenue, uniloculare, ad semina nodosum.

SEMINA plurima, subrotunda.

EMPALEMENT. Cup one-leaf, short, bell-shaped, hunched at the base on the upper side; mouth five-toothed, oblique, obtuse.

BLOSSOM butterfly-shaped, five petalled.

Standard oblong, gradually wider, straight, reflexed at the sides.

Wings two, oblong, appendicled at the base, the length of the standard.

Keel two petalled with the petals conformable to the wings, the lower margins approaching and boat-shaped.

CHIVES. Ten threads, distinct, parallel, and shaped, the length of, the blossom, within the keel. Tips very small, turned upwards.

POINTAL. Seed-bud oblong, cylindrical. Shaft the size and situation of the chives. Summit blunt.

SEED-VESSEL. Pod very long, slender, one-celled, knobbed at the seeds.

SEEDS many, roundish.

SPECIFIC CHARACTER.

Sophora foliis pinnatis; foliolis lanceolatis, mucronatis, subtus tomentosis; caule fruticoso.

Sophora with winged leaves; leaflets lance-shaped, pointed, downy beneath; stem shrubby.

REFERENCE TO THE PLATE.

1. The Cup.
2. The Standard, or upper Petal.
3. One side Petal, or Wing of the Blossom.
4. One of the Petals of the Keel.
5. The Chives and Pointal, natural size.
6. One of the Chives, magnified.
7. The Pointal, natural size.

THIS is a plant of considerable size at the Cape of Good Hope, so much so, as to be looked upon there rather as a tree, than shrub. It was first sent to England, in the year 1773, by Mr. F. Masson; is a hardy green-house plant; thrives in a mixture of loam and peat, and flowers in August, or September. There is no method, yet discovered, to propagate it in this country; but, as seeds are so common of this plant, near Cape town, there is scarce a parcel arrives, from thence, which does not contain some of them.

Among the new modern vagaries in botany, this genus has been thought, by the French botanists, (those admirable perplexers of natural order,) to be better divided in two, as some of the species happen to have the joints of the pods a little more swelled than others. How so trifling a variation, and that in a part of the plant which is known to vary, in almost every genus, through most of the species, where they are numerous; should have been deemed of sufficient moment to alter the names of so many established plants, and those determined by such authority as Linnæus, we are at a loss to determine; and are equally astonished that Willdenow should have followed them. The new genus is termed Podalyria, and to which, this plant is attached in the new system.

Cassia capensis

PLATE CCCXLVIII.

SCHOTIA SPECIOSA.

Lentiſcus-leaved Schotia.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, coloratum; tubus turbinatus, ſubcompreſſus, carnoſus; perſiſtens; limbus ſemiquinquefidus; laciniis ovatis, concavis, obtuſis, erectis, æqualibus.

COROLLA. Petala quinque, tubo calycis impoſita, oblonga, concava, obtuſa, erecta, æqualia, lateribus mutuò incumbentia, ſeſſilia, laciniis calycinis duplo longiora.

STAMINA. Filamenta decem, ſubulata, erecta, petalis paulo longiora, tubo calycis in orbem inſerta. Antheræ oblongæ, incumbentes.

PISTILLUM. Germen oblongum, compreſſum, pedicellatum. Stylus filiformis, longitudine ſtaminum. Stigma ſimplex, obtuſum.

PERICARPIUM. Legumen pedicellatum.

SEMINA bina, oſſea, ſubovata, magna.

EMPALEMENT. Cup one leaf, coloured; tube top-ſhaped, rather flattened, fleſhy; permanent; border half five-cleft; ſegments egg-ſhaped, concave, blunt, upright, equal.

BLOSSOM. Five petals, placed on the tube of the cup, oblong, concave, blunt, upright, equal, lying over each other at the ſides, fitting, twice as long as the ſegments of the cup.

CHIVES. Ten threads, awl-ſhaped, upright, a little longer than the petals, inſerted in a ring into the tube of the cup. Tips oblong, laying on the threads.

POINTAL. Seed-bud oblong; flattened, with a foot-ſtalk. Shaft thread-ſhaped, the length of the chives. Summit ſimple, blunt.

SEED-VESSEL. A pod with a foot-ſtalk.

SEEDS two, bony, a little egg-ſhaped, large.

SPECIFIC CHARACTER.

Schotia foliis pinnatis; foliolis ovatis, mucronatis; floribus cymoſis, profundé carneis.

Schotia with winged leaves; leaflets egg-ſhaped, terminating in a point; flowers in tufts and of a deep fleſh colour.

REFERENCE TO THE PLATE.

1. A Flower cut and ſpread open, ſhewn from the outſide.
2. The ſame, ſhewn from the inſide.
3. A Flower, with the petals, and border of the Cup removed, to ſhew the inſertion of the Chives into the tube of the Cup.
4. The Seed-bud, Shaft and Summit, with the tube of the Cup cut in halves.

OUR preſent ſubject ſtood formerly attached to the genus Guaiacum, under the title of G. affrum, and has been long cultivated in Britain and Holland, perhaps more than a century. Profeſſor Jacquin, in his *Collectanea ad Bot.* &c. Vol. I. p. 93, thought fit to conſtitute it a new genus, naming it after his companion R. van der Schot. About the ſame time, the year 1786, a monograph on this plant was publiſhed at Manheim, by Fred. Caſim. Medikus, under the name of Theodora Specioſa; but Jacquin's title has univerſally obtained. To preſerve this plant in good health, it ſhould be kept in the cooleſt part of the hot-houſe, or in a dry ſtove, the warmth of a common green houſe being inſufficient to preſerve its foliage through the winter months. It is a native of all that extent of the African coaſt from Senegal river, to the Cape of Good Hope, where it grows to the height of twenty feet and upwards. The ſeeds, which are frequently imported, keep many years in a vegetative ſtate, and is, almoſt, the only method hy which it can be propagated; for little ſucceſs can be hoped, either from layers, or cuttings. It flowers from October till December, delighting in a light ſandy loam. Perhaps, no plant which has been as long in cultivation with us, has ſo ſeldom been ſeen to flower; for, although the plants in the Kew gardens and elſewhere, are of a conſiderable ſize, yet have we few inſtances of its flowering, no mention being made of its time of infloreſcence in the catalogue of that collection.

From a plant, ſtill in flower, this preſent December 1803, which was literally covered with bloſſoms above two feet from its top, our drawing was taken; it is in the valuable and extenſive collection of Iſaac Swainſon, Eſq. Twickenham; which for ſcientific arrangement and richneſs in hardy ſhrubs and herbaceous plants, in particular, yields to no private or public collection we know of; and which, from the extreme urbanity of the liberal proprietor, is at all times open, to every botaniſt or collector.

Lobelia speciosa

PLATE CCCXLIX.

PROTEA DECUMBENS.

Slender-ſtemed Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 4-fida ſeu 4-petala. Antheræ lineares, inſertæ petalis infra apicem.
Calyx proprius nullus. Semina ſolitaria.

Blossom 4-cleft or 4-petalled. Tips linear, inſerted into the petals below the point.
Cup, proper, none. Seeds ſolitary.
See Protea formosa, Pl. XVII. Vol. I.

SPECIFIC CHARACTER.

Protea foliis bi-pinnatis, filiformibus; capitulis terminalibus, ſeſſilibus; floribus incarnatis, bracteolatis; caule tenue, decumbente.

Protea with doubly winged leaves, thread-ſhaped; ſmall heads of flowers fitting cloſe on the ends of the branches; flowers fleſh-coloured with ſmall floral leaves; ſtem ſlender and bending downwards.

REFERENCE TO THE PLATE.

1. A Leaf.
2. One of the Floral Leaves, magnified.
3. A Floret, complete.
4. One of the Petals, with its Chive at the point, magnified.
5. The Pointal, with the Summit detached and magnified.

From the great number of new ſpecies of the divided leaved Proteas, we are led to conjecture, that they are as numerous as thoſe with entire leaves. The P. decumbens, from the different ſpecimens we have ſeen, appears to branch into many varieties; ſome with hairy leaves and ſtems, ſome with very cloſe thick ſet leaves, and ſome, with both ſtems and leaves, quite ſmooth. They are all, nevertheleſs, very ſlender ſtemed; and, there is little doubt but, in their natural ſtate, they reſt on the ground; although in the faſhion we train them here, they have the appearance of being erect. This ſpecies is found at a conſiderable diſtance from the Cape Town, on the ſummits of dry ſandy hills; wherefore, it muſt be kept in the moſt airy part of the green-houſe, and watered but ſeldom. The ſtem does not grow more than eighteen inches long, and frequently flowers, as was the caſe in the preſent inſtance, when not more than twelve. It is propagated, readily, from cuttings made in the month of May, if treated in the method already directed for the increaſe of theſe plants. The earth in which it ſhould be planted is, a light ſandy bright loam. Our drawing was taken in the month of July, 1802, from a plant in the Hibbertian Collection, to which it was introduced by Mr. Niven, in the year 1800.

decumbens

PLATE CCCL.

LACHENALIA PUSTULATA.

Rough-leaved Lachenalia.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

COROLLA ſexpetala, infera; petalis tribus infera; petalis tribus interioribus longioribus. Stamina erecta. Capſula ſub-ovata, trialata. Semina globoſa.

BLOSSOM 6-petals, beneath; the three inner petals the longeſt. Chives erect. Capſule nearly egg-ſhaped, three-winged. Seeds globular.

See LACHENALIA PENDULA, Pl. XLI. Vol. I.

SPECIFIC CHARACTER.

Lachenalia foliis geminis, lanceolato-linearibus, denſe facie puſtulatis; ſcapo reclinato; floribus ſub-campanulatis, albo-virentibus.

Lachenalia with leaves in pairs, linearly-lance-ſhaped, thickly covered with puſtules on the face; ſtem bent downwards; flowers rather bell-ſhaped, of a whitiſh green.

REFERENCE TO THE PLATE.

1. A Flower.
2. The ſame, cut open, with the Chives in their place.
3. The Pointal.

THE drawing, from which our figure of this ſpecies of Lachenalia was taken, was made from a plant communicated by Iſaac Swainſon, Eſq. from his Botanic Gardens, Twickenham, Middleſex; where it is ſtill in flower, this preſent month of January, 1804; and where we believe it is only to be met with at preſent in this kingdom. It is one of the largeſt growing plants of the genus, the leaves when in a ſoil it approves attaining the length of eighteen inches, or more. It is as hardy as any of the tribe, very fragrant, eaſily preſerved, increaſing freely by the root, and flowering with certainty when the bulb has become of a ſufficient ſize. It grows beſt in a mixture of light loam and peat, about two-thirds loam, and one of peat.

1

2

3

Ornithogalum pustulatum.

PLATE CCCLI.

PULTENÆA RUBIÆFOLIA.

Madder-leaved Pultenæa.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

CALYX quinque-dentatus, utrinque appendiculatus. Corolla papillionacea, alis vexillo brevioribus. Legumen uniloculare, diſpermum.

CUP five-toothed, with an appendage on each ſide. Bloſſom butterfly-ſhaped, with the wings ſhorter than the ſtandard. Pod of one cell with two ſeeds.

See PULTENÆA DAPHNOIDES, Pl. XCVIII. Vol. II.

SPECIFIC CHARACTER.

Pultenæa foliis ternis, verticillatis, lanceolatis, ſerratis, rigidis; floribus capitatis, cæruleo-purpureis.

Pultenæa with leaves growing by threes in whorls, lance-ſhaped, ſawed and harſh; flowers grow in heads, and of a bluiſh purple.

REFERENCE TO THE PLATE.

1. The Cup.
2. The Standard.
3. One of the Wings.
4. The two Petals of the Keel.
5. The Chives and Pointal.
6. The same, magnified.
7. The Pointal.
8. A ripe Seed-pod, open.
9. One of the Seeds, of its natural ſize when ripe.

HERE we find another hiatus to fill up, or paſs over; either a new genus is to be formed for this plant, or we muſt not boggle at trifles, and ſkip over one of the eſſential characters of Dr. Smith's Pultenæas, the appendicles or props at the ſide of the cup, which are wanting in this plant, though agreeing in every other. We have, however, until the Doctor ſhall think fit to regulate theſe new, numerous and intricate genera and ſpecies from New Holland, made no ſcruple to add this plant, as another ſpecies, to the genus Pultenæa. It is a low growing buſhy ſhrub, ſeldom attaining more than a foot in height; is very apt to be deſtroyed by damp in winter, and is not to be propagated but by ſeeds, which, however, it perfects in this country. The bloſſoms begin to appear in May, and continue in ſucceſſion through the ſummer months of June, July, and Auguſt. It ſhould be kept warm and dry in winter, growing with moſt luxuriance in light ſandy peat earth, and flowering the ſecond year from the ſeed. This plant was firſt raiſed in 1792, by Meſſrs. Lee and Kennedy, at their nurſery, Hammerſmith, where our drawing was taken.

Collinsonia rubiæfolia.

PLATE CCCLII.

HELONIAS BULLATA.

Spear-leaved Helonias.

CLASS VI. ORDER III.

HEXANDRIA TRIGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

CALYX nullus.	EMPALEMENT, none.
COROLLA. Petala ſex, oblonga, æqualia, decidua.	BLOSSOM. Six petals, oblong, equal, deciduous.
STAMINA. Filamenta ſex, ſubulata, corolla paulo longiora. Antheræ incumbentes.	CHIVES. Six threads, awl-ſhaped, a little longer than the bloſſom. Tips lying on the threads.
PISTILLUM. Germen ſubrotundum, trigonum. Styli tres, breves, reflexi. Stigmata obtuſa.	POINTAL. Seed-bud roundiſh, three-ſided. Shafts three, ſhort and reflexed. Summits obtuſe.
PERICARPIUM. Capſula ſubrotunda, trilocularis.	SEED-VESSEL. Capſule roundiſh, three-celled.
SEMINA numeroſa, angulata, minima.	SEEDS numerous, angulated, very ſmall.

SPECIFIC CHARACTER.

Helonias foliis lanceolatis, nervoſis; bracteis cordato-lanceolatis.	Helonias with lance-ſhaped, nerved leaves; floral leaves between lance and heart-ſhaped.

REFERENCE TO THE PLATE.

1. Flower, complete.
2. The Chives and Pointal, natural ſize.
3. The ſame, magnified.

ALL the ſpecies of this genus, yet diſcovered, are natives of North America, and are conſidered as hardy herbaceous plants; the winters of this country not being too ſevere for them; although they are found as far ſouth as Carolina, yet they are more plentiful in Penſylvania, about Philadelphia. They flouriſh moſt in a ſhady, moiſt ſituation; and increase, freely, by parting the roots in the month of March. The flowers are produced in May, the flower-ſtem increaſing in length, till the flowers are entirely decayed. The Helonias bullata has been an inhabitant of our gardens ever ſince the year 1758, when it was introduced by Mr. Ph. Miller, and cultivated by him at Chelſea. See Mill. ic. 181. t. 272.

Our drawing was made at the Nurſery, Hammerſmith, in June 1801.

1

2

3

Adenias bullata.

PLATE CCCLIII.

ASPALATHUS CRASSIFOLIUS.

Thick-leaved Aſpalathus.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Threads in two sets. Ten Chives.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, ſemiquinquefidum; laciniis acuminatis, æqualibus, ſuperiore longiore.

COROLLA papillionacea.

Vexillum compreſſum, adſcendens, obovatum, externe ſæpius hirſutum, obtuſum cum acumine.

Alæ lunulatæ, obtuſæ, patulæ, vexillo breviores.

Carina bifida, alis conformis.

STAMINA. Filamenta decem, connata in vaginam, ſuperne dehiſcentem longitudinaliter, adſcendentia. Antheræ oblongæ.

PISTILLUM. Germen ovatum. Stylus ſimplex, adſcendens. Stigma acutum.

PERICARPIUM. Legumen ovatum, muticum.

SEMINA ſæpius duo, reniformia.

OBS. *Singulare huic sunt folia ex eadem gemma plura in planta frutescente.*

EMPALEMENT. Cup one leaf, half-five-cleft; ſegments tapered, equal, the upper one longer.

BLOSSOM butterfly-ſhape.

Standard compreſſed, aſcending, inverſely egg-ſhaped, often hairy on the outſide, obtuſe with a point.

Wings half-moon-ſhaped, obtuſe, ſpreading, ſhorter than the ſtandard.

Keel two-cleft, like the wing.

CHIVES. Ten threads, united into a ſheath, gaping longitudinally at top, aſcending. Tips oblong.

POINTAL. Seed-bud egg-ſhaped. Shaft ſimple, aſcending. Summit pointed.

SEED VESSEL. Pod egg-ſhaped, beardleſs.

SEEDS frequently two, kidney-ſhaped.

OBS. *This genus is singular in having several leaves from the same bud, on a shrubby plant.*

SPECIFIC CHARACTER.

Aſpalathus foliis faſciculatis, carnoſis, teretibus, glabris, apicibus ſetaceis; floribus capitatis, terminalibus; calycibus bracteatis.

Aſpalathus with leaves bundled, fleſhy, cylindrical, ſmooth and briſtled at the point; flowers grow in heads at the end of the branches; cups with floral leaves.

REFERENCE TO THE PLATE.

1. The Cup.
2. The Standard.
3. One of the Wings.
4. The Keel.
5. The Chives and Pointal.
6. The Chives, ſpread open and magnified.
7. The Pointal.

FROM the number of ſpecimens in the herbarium of G. Hibbert, Eſq. which we ſhould refer to this genus; it ſtands fair to rival, in number of ſpecies, every other, natives of the Cape of Good Hope; with the exception of Erica, Geranium, and Protea. This ſpecies has many varieties, and we are in doubt whether this is not one from the A. carnoſa, or A. pinguis of Thunberg; for although, the cup, in the one, may differ, in having the ſegments deſcribed as pointed; and in the other, the leaves may be rather three-ſided; yet, may our plant be no more than a ſlight variation from either of them: but this we cannot decide without living plants of each, for dried ſpecimens would not determine the fact.

This plant was introduced to the Hibbertian Collection, in 1800, by Mr. Niven, from the Cape. It is a tender green-houſe plant, grows to the height of eighteen inches, very buſhy, and covers itſelf with flowers about July; in which month, 1803, our drawing was taken. It has hitherto put the ability of Mr. Allen, which is not often the caſe, to a ſtand for a method to propagate it; but we have hopes, as moſt of the ſpecies do, that it will ripen its ſeeds in this country.

Cytisus scoparius

PLATE CCCLIV.

GERANIUM REVOLUTUM.

Reflex floral-leaved Geranium.

CLASS XVI. ORDER IV.

MONADELPHIA DECANDRIA. Threads united. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

MONOGYNA. Stigmata quinque. Fructus roſtratus; pentacoccus.

ONE POINTAL. Five Summits. Fruit furniſhed with long awns; five dry berries.

SPECIFIC CHARACTER.

Geranium foliis cordatis, obtuſis, nervoſis, ſæpe auriculatis; pedunculis multifloris; involucris polyphyllis, foliolis revolutis; floribus pentandris; radice tuberoſa.

Geranium with heart-ſhaped leaves, obtuſe, nerved and often eared; flower-ſtems many-flowered; fence many-leaved, leaflets rolled back; flowers with five fertile chives; root tuberous.

REFERENCE TO THE PLATE.

1. The Empalement cut open to ſhew its tubular ſtructure.
2. The Chives and Pointal.
3. The Chives, ſpread open, magnified.
4. The Pointal, magnified.

THIS very fine Geranium is, as yet, only in the Clapham Collection; it has no properties, which regard its culture or propagation, differing from the reſt of its congeners; was ſent from the Cape, by Mr. Niven, in 1800. Flowers in July. The leaves of this ſpecies have moſt affinity, in appearance, to thoſe of G. melananthum, particularly in being like them frequently eared, and even ſometimes winged. We have named it, ſpecifically, from the ſingular revolute character of the involucrum, at the baſe of each bunch of flowers.

Geranium revolutum

PLATE CCCLV.

LEEA PINNATA.

Winged-leaved Leea.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium monophyllum, campanulatum, coriaceum, quinquedentatum, perſiſtens.

COROLLA monopetala; tubus longitudine calycis; limbus quinquefidus, æqualis; laciniis ſaccatis.

Nectarium baſi interioris corollæ adnatum, corolla dimidio brevius, erectum, urceolatum, quinquefidum; lobis emarginatis.

STAMINA. Filamenta quinque, inſerta baſi exteriori nectarii. Antheræ ovatæ, verſatiles.

PISTILLUM. Germen ſubgloboſum. Stylus ſimplex, nectario brevior. Stigma obtuſum.

PERICARPIUM. Bacca orbiculata, depreſſa, quinquelocularis.

SEMINA quinque, ſolitaria.

EMPALEMENT. Cup one leaf, bell-ſhaped, leathery, five-toothed, remaining.

BLOSSOM one petal; tube the length of the cup; border five-cleft, equal; ſegments bagged.

Honey-cup fixed to the baſe of the inſide of the bloſſom, by the half ſhorter than the bloſſom, erect, pitcher-ſhaped, five-cleft; lobes notched at the end.

CHIVES. Five threads inſerted into the outſide of the baſe of the honey-cup. Tips egg-ſhaped, verſatile.

POINTAL. Seed-bud almoſt globular. Shaft ſimple, ſhorter than the honey-cup. Summit blunt.

SEED-VESSEL. Berry orbicular, flattened, five-celled.

SEEDS five, ſolitary.

SPECIFIC CHARACTER.

Leea foliis impari-pinnatis, oppoſitis; caule tereti, glabro; racemis angulatis, angulis undulatis.

Leea with winged leaves terminated by an odd one and oppoſite; ſtem round and ſmooth; branches angled; angles waved.

REFERENCE TO THE PLATE.

1. The Cup, natural ſize.
2. A Bloſſom.
3. A Flower complete, magnified.
4. The Honey-cup, ſhewn from the inſide, cut open, a little magnified.
5. A Bloſſom, with the Honey-cup and Chives, magnified.
6. The Honey-cup and Chives ſhewn from the outſide, magnified.
7. The Pointal, magnified.

LEEA and Aquilicia have, of late, been conſidered as not poſſeſſing ſufficient eſſentially differing characters to conſtitute two genera, and Aquilicia has been loſt in Leea. Our preſent ſubject is a ſpecies of the former Aquilicias, is mentioned by Gaertner, who ſays, it approaches A. ſambucina, now Leea ſambucina; to which indeed it has much reſemblance, but differs in having oppoſite, not alternate branches, being ſcentleſs, having the leaves rather rough and the ſtem ſmooth. It is a native of the Eaſt Indies, requiring the tan-bed to make it flower; is half ſhrubby, and is increaſed by cuttings. Flowers in Auguſt. Our figure is from a ſpecimen communicated to us by Aylmer Bourke Lambert, Eſq. who raiſed it from ſeeds received from Dr. Roxburg, in 1801, under the name of Leea criſpa: which is a native of Africa, and has been long in moſt of our collections of hot houſe plants, but is in the higheſt ſtate of cultivation, under the care of Mr. Hoy, in that of his Grace the Duke of Northumberland, Sion Houſe, near Brentford.

punnata

PLATE CCCLVI.

ARUM ORIXENSIS.

Orixian Cuckow-pint.

CLASS XX. ORDER XI.

GYNANDRIA POLYANDRIA. Chives on the Pointal. Many Chives.

ESSENTIAL GENERIC CHARACTER.

CALYX. Spatha monophylla, maxima, oblonga, basi convoluta, apice connivens, ventre compressa, interne colorata.

Spadix clavatus, simplicissimus, spatha paulo brevior, coloratus, inferne germinibus obvallatus, marcescens supra germina.

COROLLA nulla.

STAMINA. Filamenta nulla, nisi nectaria basi crassa, definentia in cirros filiformes, duorum ordinum e medio spadice egredientes. Antheræ plurimæ, sessiles, tetragonæ, cirrhorum duplici ordine interjectæ, spadici adnatæ.

PISTILLA. Germina plurima, basin spadicis vestientia, infra stamina collocata, obovata. Styli nulli. Stigmata villis barbata.

PERICARPIA. Baccæ totidem, globosæ, uniloculares.

SEMINA plura, subrotunda.

EMPALEMENT. Sheath one leaf, very large, oblong, convolute at the base, converging at the top, the belly compressed, coloured within.

Sheathed-Fruit-stalk club shaped quite simple, a little shorter than the sheath, coloured, set round with seed-buds on the lower part, withering above the seed-buds.

BLOSSOM none.

CHIVES. Threads none except the honey-cups, which are thick at the base and terminated in thread-shaped tendrils, issuing in two rows from the middle of the sheathed fruit-stalk. Tips many, sitting, four sided, fixed to the fruit-stalk, and disposed between the two rows of tendrils.

POINTALS. Seed-buds many, cloathing the base of the fruit-stalk, set below the chives, inversely egg-shaped. Shafts none. Summits bearded with soft hairs.

SEED-VESSELS. As many berries, globular, and one-celled.

SEEDS. Many, roundish.

SPECIFIC CHARACTER.

Arum, acule; foliis ternatis, venosis, discoloribus; spatha declinata; flore atro-purpureo.

Cuckow-pint, stemless; leaves threefold, full of veins, two-coloured; sheath bent downward; flower of a deep purple.

REFERENCE TO THE PLATE.

1. The whole flower, shewn from the front with the sheath opened, to expose the parts of fructification.

THIS pretty plant is a native of the East Indies, in that country from which it derives its specific title. It has much affinity with many others of the Genus, which at first sight appear rather as varieties, than meriting to be treated as species; but, in this instance, we submit our judgment to that of Dr. Roxburg, by whom it has been introduced to us under the name it here bears, in the year 1802. Our figure was taken, in the month of October 1803, from a plant in the collection of J. Vere, Esq. Kensington Gore. The flower is scentless.

1

num oriocensis

PLATE CCCLVII.

ARCTOTIS PARADOXA.

Chamomile-leaved Arctotis.

CLASS XIX. ORDER IV.

SYNGENESIA POLYGAMIA NECESSARIA. Tips united. Necessary Pointals.

GENERIC CHARACTER.

CALYX *communis* ſubrotundus, imbricatus; ſquamis inferioribus laxioribus, ſubulatis; mediis ovatis; intimis oblongis; apice ſcarioſo, rotundato, concavo.

COROLLA *composita* radiata; corollulæ hermaphroditæ plurimæ in diſco. Femininæ ligulatæ, fere viginti, diſci diametro longiores.

Propria hermaphroditis infundibuliformis; limbo quinquefido, apicibus reflexis, æqualibus.

Femineis ligulata, lanceolata, tenuiſſime tridentata, tubo breviſſimo.

STAMINA hermaphroditis; filamenta quinque, capillaria, breviſſima. Anthera cylindracea, quinquedentata, longitudine corollulæ.

PISTILLUM *Hermaphroditis*; germen vix manifeſtum. Stylus cylindraceus, corolla paulo longior. Stigma ſimplex.

Femineis germen ovato-tetragonum, villoſum, coronatum calyculo proprio. Stylus filiformis. Stigmata duo, ovata-oblonga, craſſiuſcula, erecta.

PERICARPIUM nullum. Calyx immutatus. Semina *Hermaphroditis* nulla.

Femineis ſolitaria, ſubrotunda, villoſa. *Pappus* perianthium proprium pentaphyllum; foliolis ovatis, patentibus, coronatus perianthii proprii foliolis ovatis in orbem poſitis.

RECEPTACULUM piloſum ſeu paleaceum, planiuſculum.

EMPALEMENT *common* roundiſh, tiled; lower ſcales more looſe, awl ſhaped; middle ones egg-ſhaped; innermoſt oblong; harſh, rounded, concave at the point.

BLOSSOM *compound* raied; hermaphrodite florets numerous in the center. Of the Females tongue-ſhaped, nearly twenty, longer than the diameter of the center.

Proper of the *hermaphrodites* funnel-ſhaped; border five-cleft, ends reflexed, equal.

Of the *Females* tongue-ſhaped, lance-ſhaped, ſlightly three-toothed; tube very ſhort.

CHIVES of the Hermaphrodites; five threads hair-like, very ſhort. Tip cylindric five-toothed, the length of the floret.

POINTAL of the *Hermaphrodites*; ſeed-bud ſcarce viſible. Shaft cylindric, a little longer than the bloſſom. Summit ſimple.

Of the *Females* ſeed-bud egg-ſhaped four-cornered, hairy, crowned by its proper cup. Shaft thread-ſhaped. Summits two, oblong-egg-ſhaped, thickiſh, upright.

SEED-VESSEL none. Empalement unchanged. Seeds in the *Hermaphrodites* none.

In the *Females* ſolitary roundiſh, hairy. *Feather*, proper cup five leaved; leaflets, egg-ſhaped, ſpreading, crowned by the proper cup with the leaflets placed in a round.

RECEPTACLE hairy or chaffy, flattiſh.

SPECIFIC CHARACTER.

Arctotis floſculis radiantibus ſterilibus; paleis diſco longioribus coloratis; foliis bipinnatis, linearibus.

Arctotis with the florets of the circumference ſterile; chaffs coloured and longer than the florets of the center; leaves doubly winged; linear.

REFERENCE TO THE PLATE.

1. An inner Scale of the cup.
2. An outer Scale of the cup.
3. A Petal of the circumference, with its tubular baſe, which is ſterile.
4. A chaffy diviſion of the florets of the center, magnified.
5. A Female floret of the center, magnified.
6. The Chives of an Hermaphrodite floret, ſpread open and magnified.
7. The Pointal of an Hermaphrodite floret, natural ſize.
8. The ſame, magnified.
9. The Seed-bud of a female floret, natural ſize, with its feather.
10. The ſame, magnified.

Of all the plants, numerous as they are, compoſing this natural Claſs, we know of no one, the Virgilia (a native of Peru, and introduced to us from the Paris gardens by Monſ. Thoin, about twenty years ago, but ſince loſt to Europe,) excepted, which can rival our preſent ſubject. It is a native of the Cape of Good Hope, and is ſaid, in the Kew Catalogue, to have been introduced to that collection, in 1774, by Mr. Maſſon. Whether this is the A. paradoxa of Linn. Sp. 1307. Vol. II, we are not certain, as the chaff, dividing the florets, is there deſcribed as of nearly the length of the ray, giving the flower an appearance of doubleneſs, and is there likewiſe marked as an annual. But, there is little doubt of its being the plant intended in the Kew Catalogue, under our title; it is there made biennial, which is its true character, as it does not flower the firſt year from ſeeds. It may be propagated by cuttings of the firſt year's growth; delights in a light ſandy loam, and flowers in July or Auguſt. Our drawing was made in 1802, from a plant in the Hibertian Collection; which had been raiſed from ſeeds, ſent the preceding year, from the Cape, by Mr. Niven.

Gazania paradoxa.

PLATE CCCLVIII.

AMARYLLIS BRASILIENSIS.

Brasilian Lily-Daffodil.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-petala, campanulata. Stigma trifidum.	Blossom 6-petalled, bell-shaped. Summit three-cleft. See Amaryllis radiata, Pl. XCV. Vol. II.

SPECIFIC CHARACTER.

Amaryllis, spatha bi-seu-triflora; petalis ovato-acuminatis, æqualibus, costatis, ad basin albidis, patentibus; genitalibus declinatis; foliis lineari-lanceolatis, acutis.	Lily-Daffodil, sheath two or three flowered; petals egg-shape tapered, equal, ribbed, white at the base and spreading; parts of fructification bent downwards; leaves linear-lance-shaped, pointed.

REFERENCE TO THE PLATE.

1. A petal with its Chive.
2. The Seed-bud, with part of the tube of the Blossom and partial Fruit-stalk.

This fine Lily, from the Brazils, can scarcely be thought more than a variety of A. Reginæ; to which plant, both this, and the A. equestris of Mr. Curtis, may be referred without much flexion of the original species. We have, however, preserved the title under which it has been known since its introduction; which was, in the year 1798, by the late Marchioness of Bute, from Spain. Our drawing was taken from a plant in the collection of J. Vere, Esq. Kensington Gore, in the month of October, 1803. It has all the merits of the most easily cultivated species of the genus; increasing freely by the bulb, growing with luxuriance in almost any earth, and requiring but little heat to make it flower.

Bletia brasiliensis

PLATE CCCLIX.

TAGETES LUCIDA.

Sweet Chili Marygold.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

GENERIC CHARACTER.

CALYX *communis* ſimpliciſſimus, monophyllus, tubuloſus, oblongus, pentagonus, quinquedentatus.

COROLLA *composita* radiata; corollulæ hermaphroditæ tubuloſæ, plures in diſco elevato; femineæ ligulatæ quinque in radio.

Propria hermaphroditis tubuloſa, ſemiquinquefida, erecta, calyce longior; laciniis linearibus, introrſum villoſis.

Femineis ligulata, hermaphrodites longior, longitudine et latitudine fere æqualis, obtuſiſſima, verſus tubum anguſtior, tomentoſa perſiſtens.

STAMINA Hermaphroditis; filamenta quinque, capillaria, breviſſima. Anthera cylindracea, tubuloſa.

PISTILLUM *Hermaphroditis*; Germen oblongum. Stylus filiformis, longitudine ſtaminum. Stigma bifidum, tenue, reflexum.

Femineis; germen oblongum. Stylus filiformis, longitudine hermaphroditis. Stigma bifidum, tenue, reflexum,

PERICARPIUM nullum. Calyx immutatus.

SEMINA Hermaphroditis ſolitaria, linearia, compreſſa, calyce paulo breviora. Pappus ariſtis quinque, erectis, acuminatis, inæqualibus.

Femineis ſimilima hermaphroditis.

RECEPTACULUM nudum, planum.

EMPALEMENT *common*, quite ſimple, one leaf, tubular, oblong, five-ſided, five-toothed.

BLOSSOM, *compound* raiſed; hermaphrodite florets tubular, numerous in an elevated center; females tongue-ſhaped five in the circumference.

Proper of the *Hermaphrodites*, tubular, half five-cleft, upright, longer than the cup; ſegments linear, hairy within.

Of the *Females* tongue-ſhaped longer than the hermaphrodites, of nearly the ſame length and breadth, very blunt, narrower towards the tube, downy, remaining.

CHIVES of the Hermaphrodites; five threads, hair-like, very ſhort. Tip cylindric, tubular.

POINTAL of the *Hermaphrodites*; ſeed-bud oblong. Shaft thread-ſhaped, the length of the chives. Summit two-cleft, ſlender, reflexed.

Of the *Females*; ſeed-bud oblong. Shaft thread-ſhaped, the length of the hermaphrodite. Summit two-cleft, ſlender, reflexed.

SEED-VESSEL none. Cup unchanged.

SEEDS of the Hermaphrodites ſolitary, linear, flat, a little ſhorter than the cup. Feather five awns, upright, tapered, unequal.

Of the *Females* like the hermaphrodites.

RECEPTACLE naked, flat.

SPECIFIC CHARACTER.

Tagetes caule herbaceo, erecto, floribus cymoſis, parvis, luteis, odoratiſſimis.

Marygold with an upright, herbaceous ſtem; flowers in tufts, ſmall, yellow, and very ſweet ſcented.

REFERENCE TO THE PLATE.

1. The common Empalement.
2. A Floret of the circumference, with its ſeed-bud and pointal.
3. The ſame, magnified.
4. A Floret of the center, natural ſize.
5. The ſame, magnified.
6. A ripe seed, magnified.

THIS plant is a native of Chili, South America, and was ſent to England by Dr. Ortega, from the Royal Gardens, Madrid, to the late Marchioneſs of Bute; who firſt raiſed it from ſeeds in the year 1798. It is perfectly herbaceous, but will flower the firſt year from the ſeed; will endure moderate froſt, and may be conſidered as a hardy herbaceous plant. Is increaſed either by ſeeds, or by parting the roots; delights in a moderately ſtiff ſoil; flowering from July till November. If kept in a pot, the flowers, which are very fragrant, will continue in ſucceſſion through the whole winter.

Tagetes minuta of Linnæus's Sp. Plant. Vol. II. p, 1250, quoted from his Hortus Cliffortianus, and Dillenius's Hortus Elthamenſis, ſeems much affined to this plant; but, as that is annual, this cannot be conſidered as a variety of it.

Our drawing was taken at the Hammerſmith Nurſery.

Tagetes lucida

PLATE CCCLX.

RENEALMIA NUTANS.

Drooping-flowered Renealmia.

CLASS I. ORDER I.

MONANDRIA MONOGYNIA. One Chive. One Pointal.

GENERIC CHARACTER.

CALYX. Perianthium ſuperum, monophyllum, apice rumpens in duo ſeu tres dentes irregulares.

COROLLA monopetala. Tubus rectus, cylindricus; limbus trifidus; laciniis duabus ſuperioribus oblongis, rotundatis, æqualibus; inferiore ſuperioribus vix longiore, canaliculata, oblonga.

Nectarium tubo corollæ adnatum, ſub laciniis ſuperioribus adſcendens, rectum, longitudine corollæ, oblongum, baſi utrinque unidentatum, tum ſinu excavato, apice dilatatum et obtuſe trilobatum.

STAMEN. Filamentum nullum. Anthera unica, fauci tubi inſerta, in ſinu laciniæ inferioris corollæ, nectario oppoſita, libera, recta, linearis, emarginata, interius ſulco exarata, longitudine et latitudine laciniæ corollæ.

PISTILLUM. Germen inferum, oblongum, obſolete triquetrum, glabrum. Stylus filiformis, glaberrimus, erectus, longitudine corollæ. Stigma peltatum; capitulo plano; latere ad nectarium vergente truncato, perforato, foramine in ſtylum decurrente.

PERICARPIUM. Bacca oblonga, triſulca, teres, glabra, umbilico terminata; carnoſa, in medio trilocularis. Loculamenta mollia, membranacea.

SEMINA plurima, oblonga, truncata, tetragona, glaberrima.

EMPALEMENT. Cup above, one-leafed, breaking open into two or three irregular teeth.

BLOSSOM on petal. Tube ſtraight, cylindrical; border three-cleft; the two upper ſegments oblong, rounded, equal; the lower one, ſcarcely longer than the upper ones, channelled, oblong.

Honey cup fixed to the tube of the bloſſom, aſcending beneath the upper ſegment ſtraight the length of the bloſſom, oblong one-toothed on each ſide of the baſe, then with a hollow boſom widening at the end and obtuſely three-lobed.

CHIVE. Thread, none. Tip one inſerted into the throat of the tube, in the boſom of the lower ſegment of the bloſſom, oppoſite to the honey-cup, free, ſtraight, linear, notched at the end, grooved on the inſide, of the ſame length and breadth as the ſegment of the bloſſom.

POINTAL. Seed-bud beneath, oblong, obſcurely three ſided, ſmooth. Shaft thread-ſhaped, very ſmooth, upright the length of the bloſſom. Summit ſhield-ſhaped; with a flat head, the ſide fronting the honey-cup appearing cut off, perforated by a hole running into the ſhaft.

SEED VESSEL. Berry oblong, three-furrowed, cylindrical, ſmooth, terminated by a navel, fleſhy in the middle, three-celled. Cells ſoft, ſkinny.

SEEDS numerous, oblong, appearing cut off, four-cornered, very ſmooth.

SPECIFIC CHARACTER.

Renealmia foliis vaginantibus; floribus racemoſis terminalibus pendulis; fructu piloſo.

Renealmia with ſheathing leaves; flowers in bunches terminating the branches, hanging down, fruit hairy.

REFERENCE TO THE PLATE.

1. A miniature repreſentation of the plant.
2. The outer ſheath of the bloſſom.
3. A flower complete.
4. The Honey-cup.
5. The Chive, Pointal, and Seed-bud.
6. The Pointal and Seed-bud cleared of the ſmall inner ſheath which ſurrounds the baſe of the chive and ſhaft; with the ſummit detached and magnified.
7. One of the ſmall corpuſculæ which embrace the baſe of the ſhaft, magnified.
8. The ſmall ſheath which crowns the ſeed-bud, magnified.
9. The Seed-bud, cut tranſverſely, magnified.

AMONGST the numerous new plants introduced from China by the late Mr. Slater, of Laytonſtone, in the year 1793, this is certainly to be conſidered as amongſt the moſt beautiful. The only drawback to its general merit, as a hot-houſe plant, is the great height to which it might attain before it flowers; being in common fourteen or fifteen feet. It propagates by offsets, and is kept with little trouble; as it will flouriſh in almoſt any ſoil, and will flower, if ſet in any part of the hot-houſe, ſo as not to interrupt its growth, the bloſſoms being produced only from the ſummit. Although with us the ſtem is permanent, as with ſome others of the ſame natural habit, yet it cannot, we think, with propriety be conſidered as either a tree or ſhrub, but rather herbaceous. Some contention, at firſt, aroſe whether this plant ſhould be referred to the preſent Genus; which was formed, by the younger Linnæus, from a plant a native of Surinam, S. America, ſome of the parts not exactly correſponding, eſpecially the fruit; we have nevertheleſs made no ſcruple in placing it to that Genus, with which, upon an inſpection of the diſſections, it will be found very well to accord. Our figure was taken from a plant which flowers, annually, in the month of July, in the Collection of J. Vere, Eſq. Kenſington Gore.

Renealmia nutans.

INDEX

TO THE PLANTS CONTAINED IN VOL. V.

Plate	289	Protea cordata	Heart-ſhape-leaved Protea	G. H.	Shrub.	March.
	290	Aponogeton diſtachyon	Broad-leaved Aponogeton	H. H.	Aquat.	AllSummer
	291	Senecio pſeudo-China	China-root Groundſel	H. H.	Herb.	July.
	292	Geranium undulatum	Waved-flowered Geranium	G. H.	Herb.	June.
	293	Lachnæa purpurea	Purple-flowered Lachnæa	G. H.	Shrub.	July.
	294	Protea candicans	Hoary-leaved Protea	G. H.	Shrub.	Auguſt.
	295	Paſſiflora aurantia	Norfolk Iſland Paſſion-Flower	G. H.	Shrub.	July.
	296	Lachenalia roſea	Roſe-coloured Lachenalia	G. H.	Bulb.	May.
	297	Nymphæa odorata	Sweet-ſcented Water-Lily	H. H.	Aquat.	AllSummer
	298	Anthericum coſtatum	Ribbed-leaved Anthericum	G. H.	Bulb.	Auguſt.
	299	Lachenalia reflexa	Reflexed-flowered Lachenalia	G. H.	Bulb.	June.
	300	Geranium oxalidifolium	Wood-Sorrel-leaved Geranium	G. H.	Herb.	July.
	301	Protea grandiflora. *Var. fol. und.*	Large-flowered Protea. *Waved-leaved Var.*	G. H.	Shrub.	May.
	302	Lachenalia fragrans	Sweet-ſcented Lachenalia	G. H.	Bulb.	March.
	303	Geranium barbatum	Bearded-leaved Geranium	G. H.	Herb.	July.
	304	Davieſia ulicifolia	Furze-leaved Davieſia	G. H.	Shrub.	May.
	305	Geranium coronillæfolium	Coronilla-leaved Geranium	G. H.	Herb.	July.
	306	Aletris fragrans	Sweet-ſcented Aletris	H. H.	Shrub.	May.
	307	Protea globoſa	Globe-flowered Protea	G. H.	Shrub.	May.
	308	Crotolaria verrucoſa	Blue-flowered Crotolaria	H. H.	Ann.	May.
	309	Pultenæa villoſa	Hairy Pultenæa	G. H.	Shrub.	June.
	310	Stachys coccinea	Scarlet Clownheal	G. H.	Herb.	July.
	311	Geranium pinnatum	Winged-leaved Geranium	G. H.	Herb.	May.
	312	Styphelia viridis	Green-flowered Styphelia	G. H.	Shrub.	April.
	313	Juſticia lucida	Shining-leaved Juſticia	H. H.	Shrub.	Auguſt.
	314	Itea ſpinoſa	Thorny Tea	G. H.	Shrub.	September.
	315	Orchis bicornis	Two-horned Orchis	H. H.	Herb.	September.
	316	Olea apetala	Petalleſs Olive	G. H.	Shrub.	March.
	317	Geranium undulatum. *Minor*	Waved-flowered Geranium. *Leſſer Var.*	G. H.	Herb.	July.
	318	Hæmanthus multiflorus	Many-flowered Blood-Flower	H. H.	Bulb.	June.
	319	Vicia galegifolia	Goat's-Rue-leaved Vetch	G. H.	Herb.	Auguſt.
	320	Pultenæa elicifolia	Holly-leaved Pultenæa	G. H.	Shrub.	June.
	321	Arethuſa plicata	Plaited-leaved Arethuſa	H. H.	Herb.	July.
	322	Pitcairnia latifolia	Broad-leaved Pitcairnia	H. H.	Herb.	July.
	323	Geranium barbatum. *Var. Minor.*	Bearded-leaved Geranium. *Leſſer Var.*	G. H.	Herb.	July.
	324	Magnolia purpurea	Purple-flowered Magnolia	H. H.	Shrub.	June.
	325	Codon Royeni	Prickly Codon	G. H.	Bienn.	Auguſt.
	326	Pharnaceum lineare. *Fl. alb.*	Linear-leaved Pharnaceum	G. H.	Shrub.	July.
	327	Xeranthemum argenteum	Silvery Everlaſting-Flower	G. H.	Shrub.	April.
	328	Geranium bubonifolium	Macedonian-Parſley-leaved Geranium	G. H.	Herb.	June.
	329	Pharnaceum lineare	Linear-leaved Pharnaceum. *White Var.*	G. H.	Shrub.	July.
	330	Nymphæa ſtellata	Starr'd Water-Lily	H. H.	Aquat.	Auguſt.
	331	Xylophylla falcata	Cymitar-ſhaped-leaved Xylophylla	H. H.	Shrub.	Auguſt.
	332	Protea anemonifolia	Anemony-leaved Protea	G. H.	Shrub.	Auguſt.
	333	Sagittaria lancifolia	Lance-leaved Arrowhead	H. H.	Aquat.	July.
	334	Struthiola tomentoſa	Downy-leaved Struthiola	G. H.	Shrub.	Auguſt.
	335	Gladiolus pyramidatus	Pyramidal-ſpiked Gladiolus	G. H.	Bulb.	Auguſt.
	336	Anchuſa capenſis	Cape Alkanet	G. H.	Shrub.	July.
	337	Protea triternata	Cluſter-headed Protea	G. H.	Shrub.	July.
	338	Geranium coronopifolium	Buck's-horn-leaved Geranium	G. H.	Bienn.	Auguſt.
	339	Lobelia coronopifolia	Buck's-horn-leaved Lobelia	G. H.	Bienn.	Auguſt.
	340	Lobelia gracilis	Slender-ſtemed Lobelia	G. H.	Ann.	Auguſt.
	341	Phaſeolus Caracalla	Snail-Flower Kidney-Bean	H. H.	Shrub.	Auguſt.
	342	Cobbea ſcandens	Climbing Cobbea	G. H.	Shrub.	October.
	343	Blandfordia cordata	Heart-ſhape-leaved Blandfordia	G. H.	Herb	June.
	344	Epidendrum enſifolium	Sword-ſhaped-leaved Epidendrum	H. H.	Shrub.	September.
	345	Hyacinthus corymboſus	Linear-leaved Cape-Hyacinth	G. H.	Bulb.	October.
	346	Caſuarina ſtricta	Upright Caſuarina	G. H.	Shrub.	November.
	347	Sophora capenſis	Vetch-leaved Sophora	G. H.	Shrub.	Auguſt.
	348	Schotia ſpecioſa	Lentiſcus-leaved Schotia	H. H.	Shrub.	October.
	349	Protea decumbens	Slender-ſtemed Protea	G. H.	Shrub.	July.
	353	Lachenalia puſtulata	Rough-leaved Lachenalia	G. H.	Bulb.	December.
	351	Pultenæa rubiæfolia	Madder-leaved Pultenæa	G. H.	Shrub.	July.
	352	Helonias bullata	Spear-leaved Helonias	Har.	Herb.	June.
	353	Aſpalathus craſſifolius	Thick-leaved Aſpalathus	G. H.	Shrub.	July.
	354	Geranium revolutum	Reflex floral-leaved Geranium	G. H.	Herb.	July.
	355	Leea pinnata	Winged-leaved Leea	H. H.	Herb.	Auguſt.
	356	Arum orixenſis	Orixian Cuckow-pint	H. H.	Herb.	October.
	357	Arctotis paradoxa	Chamomile-leaved Arctotis	G. H.	Bienn.	Auguſt.
	358	Amaryllis braſilienſis	Braſilian Lily-Daffodil	H. H.	Bulb.	October.
	359	Tagetes lucida	Sweet Chili Marygold	G. H.	Herb.	Auguſt.
	360	Renealmia nutans	Drooping-flowered Renealmia	H. H.	Herb.	July.

ERRATA.

Plate 297, Clafs. Pro Poliandria, lege, *Polyandria.*
299, Sp. Ch. lin. 2. pro eqalis, lege, *æqualis.*
301, Sp.Ch. lin. ntt. pro criftitatæ, lege, *cristatæ.*
309, Eff Gen. Ch. lin. 1, pro quinquedentatis, lege, *quinquedentatus.*
310, Plate, for Stæches, read, Stachys. Calyx lin 3, pro dentriculis, lege, *denticulis.*
315, Pointal. lin. 1, put (.) after top-fhaped.
314, Pericarpium, lin. 2, pro muconato, lege, *mucronato.*
316, Title, for Petal-lefs, read, *Petalless*
323, Sp. Ch. lin. 1, poft, inequaliter, dele (,)
325, Calyx, lin. 2, pro duodecem, lege, *duodecim.* Defcription, lin. 2, for, vegetating, read, vegitating.
326, Sp. Ch. pro inequalibus, lege, *inæqualibus.*
329, Effen. Ch. lin. 3, direction for V. V. put *Vol. V.*
331, Gen. Ch. Pointal, lin. 2, after *three*, for, fhort, read, *spreading, two-cleft.*
337, Sp. Ch. lin. 3, pro bracteis, lege, *bracteatis.*
341, Plate, for Phafeolis, read, *Phaseolus.*
342, Defcrip. lin. 4, for, Eaft Indies, read, *Chili, South America.*
345, Plate, for, Corymbofa, read, *Corymbosus.*
346, Defcrip. lin. 8, for, has, like this, read, *have like this.*
347, Chives, lin. 2, after, length of, leave out (,)
350, Effen. Ch. lin. 1, dele, *petalis tribus infera.*
353, Title, pro craffifolius, lege, *crassifolia.*

Alphabetical Index to the 1ſt. 2d. 3d. 4th. and 5th. Volume of the Botaniſt's Repoſitory.

	Pl.	vol
...canarienſe	201	3
...fragrans	306	5
...farmentoſa	54	1
...gracile	107	2
...lis Brafilienſis	358	5
... Fothergillia	163	3
... radiata	95	2
... reticulata	179	3
...a capenſis	336	5
...ne palmata	172	3
...ocum coſtatum	298	5
...is erinacea	15	1
...ra Æthiopica	210	3
... fulgens	192	3
... ringens	32	1
..., ſpicata	56	1
...tubuloſa	174	3
...eton diſtachyon	290	5
...a paradoxa	357	5
...a plicata	321	5
...cyanea	10	1
..., major	160	3
...rixenſis	356	5
...us gigantea	271	4
...ius craſſifolius	353	5
...dentatus	61	1
...rflexus	93	2
...ia Auſtriaca	80	3
... capenſis	9	1
...a Pontica	16	1
...a ericafolia	156	3
... præmorſa	258	4
... ſerrata	82	2
...a rubioides	198	3
...a Leucoxylon	43	1
... pandorana	86	2
...ſia cordata	343	5
...a cordata	31	1
...a pinnata	58	1
...ſia undulata	167	3
...ra fœtida	80	2
... pedunculata	84	2
...a japonica, *alb. pl.*	25	1
..., japonica, *pl. vg. to.*	91	2
..., japonica, *rub. pl.*	199	3
...ria latifolia	201	4
...ra ſtricta	346	5
...a Ahouai	231	4
...undulata ..... a	130	2
...ia campanuloides	40	1
... Ruelloides	34	1
...ia racemoſa	284	4
...anthemum tricolor	109	2
...ia aurita	24	1
...ia viorna	71	1
...ſava	223	4
...a ſcandens	342	5
... Royeni	325	5
...a ſpectoſa	157	3
...a Mathioli	1	1
...a alba	17	1
...a odoratiſſima	26	1
...a Capparoides	176	3
...a giganteum	169	3
... ſpirale	92	2
...a ſalignæ	79	2
...ria verrucoſa	308	5
...a capenſis	141	2
...ius obliquus	265	4
...a tomentoſus	237	4
...a Pontica	73	2
...a alicifolia	304	5
... lanifolia	33	1
...ia triquetra	230	4
...a borealis	206	3
...a ſubrecta	187	3
...a argenteum	154	3
... ferociſſimum	39	1
... glaucophyllum	165	3
... grandiflorum	20	1
...um buxifolium	218	4
..... lineare	272	4
..... ſalignum	215	3
..... ſericeum	100	2
...um cochleatum	13	1
... enſifolium	344	5
... ſinenſe	216	3
... repens	102	2
...um pulchellum	88	2
... ...ſa	257	4

	Pl.	vol
Ferraria pavonia	178	3
.....viridiflora	285	4
Fuchſia lycioides	120	2
Galaxia grandiflora	164	3
.....ovata	94	2
Gardenia tubiflora	183	3
Gaultheria procumbens	116	2
Gentiana purpurea	117	2
Geranium aſtragalifolium	190	3
.....barbatum	303	5
..... barbatum minor	323	5
.....bubonifolium	328	5
.....ciliatum	247	4
.....coronillæfolium	305	5
.....coronopifolium	338	5
.....cortuſæfolium	121	2
.....craſſifolium	136	2
.....echinatum	158	3
.....elegans	28	1
.....fragile	37	1
.....grandiflorum	12	1
.....inciſum	67	1
.....incraſſatum	246	4
.....laciniatum	131	2
.....flo. purp.	204	3
.....bicolor	269	4
.....lineare	193	3
..... melananthum	209	3
.....oxalidifolium	300	5
.....pictum	168	3
.....piloſum	259	4
.....pinnatum	311	5
.....præmorſum	150	3
.....procumbens	254	4
..... punctatum	60	1
.....quinquevulnerum	114	2
.....radiatum	222	4
.....reflexum	224	4
.....reniforme	108	2
.....revolutum	354	5
.....roſeum	173	3
.....ſelinum	239	4
.....ſpathulatum	152	3
.....curviflo.	282	4
.....tomentoſum	115	2
.....undulatum	292	5
.....minor	317	5
Gladiolus alatus	8	1
.....abreviatus	166	3
.....blandus	99	2
.....campanulatus	188	3
.....carneus	240	4
.....criſpus	142	2
.....cuſpidatus	147	3
..... pet. criſp.	219	4
.....galeatus	122	2
.....gramineus	62	1
.....grandiflorus	118	2
.....longiflorus	5	1
.....nanus	137	2
.....orchidiflorus	241	4
.....plicatus	268	4
.....polyſtachius	66	4
.....præcox flo. rub.	38	1
.....pyramidatus	335	5
.....ringens cin. odor.	27	1
.....multiflo.	227	4
.....undul.	275	4
.....roſeus	11	1
.....ſtriatus	111	2
..... verſicolor	19	1
Glorioſa ſuperba	129	2
Gnidia lævigata	89	2
.....oppoſætifolia	225	4
.....pinifolia	52	1
..... ſimplex	70	1
Goodenia calendulacea	22	1
.....ovata	68	1
Hæmanthus multiflorus	318	5
Hebenſtreitia aurea	252	4
Heliconia pſittacorum	124	2
Helonias bullata	352	5
Hemerocallis alba	194	3
.....cærulea	6	1
..... graminea	244	4
Hermannia pulverata	161	3
Hibbertia volubilis	126	2
Hibiſcus mutabilis fl. pl.	228	4
..... Paterſonius	286	4
Hillia longiflora	145	3

	Pl.	vol
Houſtonia coccinea	106	2
Hyacinthus corymboſus	345	5
Hypoxis linearis	171	3
.....obliqua	195	3
.....ſtellata	101	2
.....fl. alb.	236	4
Iris longifolia	45	1
Itea ſpinoſa	314	5
Ixia ariſtata	87	2
....bulbifera	48	1
....bulbocodium	170	3
....capitata ovat.	68	1
.....fl. aur.	50	1
.....fl. al. fun. nig.	159	3
.....ſtellata	232	4
.... cinnamonea	44	1
....columnaris	203	3
.....verſic.	211	3
.....latifol.	213	3
.....grandiflo.	250	4
.... criſpifolia fl. cærul.	35	1
....crocata nig. mac.	134	2
....fiſtuloſa	59	1
....maculata	196	3
.....min. fl. pur.	256	4
....polyſtachia	155	3
.....incar.	128	2
.... punctata	177	3
.... puſilla	245	4
....reflexa	14	1
....ſpecioſa	186	3
....ſpicata	29	1
Ixora Pavetta virid. nig.	76	2
Jaſminum graci'e	127	2
Jatropha panduræfolia	267	4
Juſticea lucida	313	5
Lachenalia fragrans	302	5
.....pendula	41	1
.....purpureo cærul.	257	4
.....puſtulata	350	5
.....quadricolor	148	3
.....reflexa	299	5
.....roſea	296	5
Lachnæa eriocephala	104	2
.....purpurea	293	5
Lambertia formoſa longi flor.	69	1
Laſeopetalum ferrugineum	208	3
Leea pinnata	355	5
Limonia trifoliata	143	2
Lobelia coronopifolia	339	5
.....gracilis	340	5
.....pinifolia	273	4
Magnolia fuſcata	229	4
.....pumila	226	4
.....purpurea	324	5
Mahernia odorata	85	2
Malpighia craſſifolia	49	1
Malva divaricata	182	3
.....reflexa	135	2
Maſſonia ſcabra	220	4
.....violacea	46	1
Melaleuca coronata	278	4
.....ericæfolia	175	3
.....hypericifolia	200	3
Melanthium viride	233	4
Mesembryanthemum glabrum	57	1
Metroſidera hirſuta	281	4
Mimoſa diſcolor	235	4
.....longifolia	207	3
.....ſtricta	53	1
Monſonia filia	276	4
Moræa Northiana	255	4
.....tricolor	83	2
Muſa coccinea	47	1
Neotia ſpecioſa	3	1
Nymphæa cærulea	197	3
.....ordorata	297	5
.....ſtellata	330	5
Olea apetala	316	5
Ophyrs lilifolia	65	1
Orchis bicornis	315	5
.....ciliaris	42	1
Ornithogalum lacteum	274	4
.....odoratum	260	4
Pæonia albiflora	64	1
Paſſiflora aurantia	295	5
.....maliformis	217	4
Pergularia minor	184	3
..... odoratiſſima	185	3
Perſoonia lanceolata	74	2

	Pl.	vol
Perſoonia latifolia	280	4
.....linearis	77	2
Pharnaceum lineare	326	5
..... fl. alb.	329	5
Phaſeolus Caracalla	341	5
Phyſalis proſtrata	75	2
Pitcairnia latifolia	322	5
..... ſulphurea	249	4
Pittoſporum coriaceum	151	3
Platylobium lanceolatum	205	3
..... ovatum	266	4
..... ſcolopendrum	191	3
Pogonia debilis	212	3
.....glabra	283	4
Primula Cortuſoides	7	1
Protea anemonifolia	332	5
.....candicans	294	5
.....cordata	289	5
.....cynaroides	288	4
.....decumbens	349	5
.....formoſa	17	1
.....globoſa	307	5
.....glomerata	264	4
.....grandiflora fol. und.	301	5
.....lagopus	243	4
.....longifolia nigra	132	2
..... ferr. purp.	133	2
..... cono turb.	144	2
.....pinifolia	76	2
.....pulchella	270	4
.....ſpecioſa latifolia	110	2
..... nigra	103	2
..... fol. glab.	277	4
.....ſpicata	234	4
.....triternata	337	5
.....umbellata	248	4
Pſoralea aculeata	146	3
Pultenæa dapnoides	98	2
.....ilcifolia	320	5
.....rubiæfolia	331	5
.....villoſa	309	5
Punica granatum fl. alb.	96	2
Renealmia nutans	360	5
Rhododendron Dauricum	4	1
..... punctatum	36	1
Roëlla decurrens	238	4
Sagittaria lancifolia	333	5
Samyda ſerrulata	202	3
Senecio pſeudo China	291	5
Septas capenſis	90	2
Schotia ſpecioſa	348	5
Sophora capenſis	347	5
Sowerbia juncea	81	2
Sprengelia incarnata	2	1
Stachys coccinea	310	5
Struthiola ciliata	149	3
..... fl. rub.	139	2
.....imbricata	133	2
.....ovata	119	2
.....tomentoſa	334	5
Styphelia parviflora	287	4
.....triflora	72	1
..... viridis	312	5
Tagetas lucida	359	5
Talinum patens	253	4
Thunbergia fragrans	123	2
Ufteria ſcandens	63	1
Vaccinium amænum	138	2
..... arctoſtaphyllus	30	1
..... craſſifolium	105	2
..... dumoſum	112	2
..... formoſum	97	2
..... frondoſum	140	2
..... parviflorum	125	2
..... ſtaminium	263	4
..... virgatum	181	3
Verbaſcum ferrugineum	162	3
Vereia crenata	21	1
Vicia galegifolia	319	5
Viola pedata	153	3
Weſteringia roſmarinacea	214	3
Wurmbea capenſis β	221	4
Xeranthemum argenteum	327	5
..... faſciculatum	242	4
..... fl. alb.	279	4
..... ſpeciociſſimum	51	1
..... ſpirale	262	4
Xylophylla falcata	331	5
Zinnia verticillata	189	
..... violacea	55	